

# Colorado Department of Public Health and Environment

# **OPERATING PERMIT**

Rocky Mountain Energy Center

First Issued: July 1, 2007

Renewed: July 1, 2012

Last Revised: August 8, 2012

## AIR POLLUTION CONTROL DIVISION COLORADO OPERATING PERMIT

**050PWE279** 

FACILITY NAME: Rocky Mountain OPERATING PERMIT NUMBER

**Energy Center** 

FACILITY ID: 1231342

RENEWED: July 1, 2012 EXPIRATION DATE: July 1, 2017

MODIFICATIONS: See Appendix F of Permit

Issued in accordance with the provisions of Colorado Air Pollution Prevention and Control Act, 25-7-101 et seq. and applicable rules and regulations.

ISSUED TO: PLANT SITE LOCATION:

Public Service Company of Colorado 6211 Weld County Road 51

1800 Larimer Street Keenesburg, CO 80643

Denver, CO 80202 Weld County

INFORMATION RELIED UPON

Operating Permit Application Received: May 10, 2011

And Additional Information Received: December 20, 2010, March 23 and September 16, 2011

Nature of Business: Electrical Power Generation

Primary SIC: 4911

RESPONSIBLE OFFICIAL FACILITY CONTACT PERSON

Name: George Hess Name: Gary Magno

Title: General Manager – Power Title: Manager Environmental Services -

(303) 571-7282 Air Quality Compliance

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SUBMITTAL DEADLINES

Semi-Annual Monitoring Period: July 1 – December 31, January 1 – June 30

Semi-Annual Monitoring Report: Due on February 1, 2013 & August 1, 2013 & subsequent years

Annual Compliance Period: July 1 – June 30

Annual Compliance Certification: Due on August 1, 2013 & subsequent years

Note that the Semi-Annual Monitoring Reports and Annual Compliance Certifications must be received at the Division office by 5:00 p.m. on the due date. Postmarked dates will not be accepted for the purposes of determining the timely receipt of those reports/certifications.

FOR ACID RAIN SUBMITTAL DEADLINES SEE SECTION III.4 OF THIS PERMIT

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#### **SECTION I - General Activities and Summary**

#### 1. Permitted Activities

1.1 The Rocky Mountain Energy Center (RMEC) is an electric generating facility as defined under Standard Industrial Classification 4911. The facility consists of two natural gas fired combustion turbines, two heat recovery steam generators (HRSG), each equipped with natural gas fired duct burners, a steam turbine, cooling tower and auxiliary boiler. There are two diesel fired engines, one driving an emergency generator and one driving a fire pump. There is also a cold cleaner solvent vat and a gasoline storage tank that are included in Section II of the permit. The RMEC has the capacity to generate up to 630 MW of electricity. Each combustion turbine can generate approximately 152 MW, with an additional 326 MW (at peak capacity) from the steam turbine. The turbines are not equipped with a by-pass stack, therefore, the turbines only operate in combined cycle mode (i.e. turbine plus HRSG).

The facility is located at 6211 Weld County Road 51, just east of the town of Hudson, in Weld County Colorado (bounded by CR 49 to the west, CR 16 to the north and CR 51 to the east). The area in which the plant operates is designated as attainment for all criteria pollutants except ozone. It is classified as non-attainment for ozone and is part of the 8-hr Ozone Control Area as defined in Regulation No. 7, Section II.A.1.

There are no affected states within 50 miles of this facility. Rocky Mountain National Park, a federal class I designated area is within 100 km of this facility.

- 1.2 Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air pollutants from this facility in accordance with the requirements, limitations, and conditions of this permit.
- 1.3 This Operating Permit incorporates the applicable requirements contained in the underlying construction permits, and does not affect those applicable requirements, except as modified during review of the application or as modified subsequent to permit issuance using the modification procedures found in Regulation No. 3, Part C. These Part C procedures meet all applicable substantive New Source Review Requirements of Part B. Any revisions made using the provisions of Regulation No. 3, Part C shall become new applicable requirements for purposes of this operating permit and shall survive reissuance. This permit incorporates the applicable requirements (except as noted in Section II) from the following construction permit (formerly issued to Rocky Mountain Energy Center, LLC): 02WE0228.
- 1.4 All conditions in this permit are enforceable by US Environmental Protection Agency, Colorado Air Pollution Control Division (hereinafter Division) and its agents, and citizens unless otherwise specified. **State-only enforceable conditions are:** Permit Condition Number(s): Section II, Conditions 1.12.1 and 3.11 (opacity) and Section V Conditions 3.g (last paragraph), 14 and 18 (as noted)

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1.5 All information gathered pursuant to the requirements of this permit is subject to the Recordkeeping and Reporting requirements listed under Condition 22 of the General Conditions in Section V of this permit.

#### 2. Alternative Operating Scenarios

- 2.1 The permittee shall be allowed to make the following changes to its method of operation without applying for a revision of this permit.
  - 2.1.1 No separate operating scenarios have been specified.

### 3. Nonattainment Area New Source Review (NANSR) and Prevention Of Significant Deterioration (PSD)

- 3.1 This facility is categorized as a PSD major stationary source (potential to emit of PM,  $PM_{10}$ ,  $NO_X$  and  $CO \ge 100$  tons/year). Future modifications at this facility resulting in a significant net emissions increase (see Colorado Regulation No. 3, Part D, Sections II.A.26 and 42) or a modification which is major by itself (Potential to Emit  $\ge 100$  tons/year) for any pollutant listed in Colorado Regulation 3, Part D, Section II.A.42 for which the area is in attainment or attainment/maintenance may result in the application of the PSD review requirements.
- 3.2 This source is categorized as a NANSR major stationary source (Potential to Emit of  $NO_X \ge 100$  tons/year). Future modifications at this facility resulting in a significant net emissions increase (see Regulation No. 3, Part D, Sections II.A.26 and 42) for VOC or  $NO_X$  or a modification which is major by itself (Potential to Emit  $\ge 100$  tons/year of either VOC or  $NO_X$ ) may result in the application of the NANSR review requirements
- 3.3 There are no other Operating Permits associated with this facility for purposes of determining applicability of Prevention of Significant Deterioration regulations.

#### 4. Accidental Release Prevention Program (112(r))

4.1 Based on the information provided by the applicant, this facility is subject to the provisions of the Accidental Release Prevention Program (section 112(r)) of the Federal Clean Air Act.

#### **5.** Compliance Assurance Monitoring (CAM)

5.1 The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV:

Units S001 and S002 – Combustion Turbines/HRSGs/Duct Burners

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See Section II, Condition 1.13 for compliance assurance monitoring requirements.

#### 6. Summary of Emission Units

6.1 The emissions units regulated by this permit are the following:

Emission Unit No./ Facility ID	AIRS Stack Number	Description	Startup Date	Pollution Control Device
S001 / CT- 01	001	One (1) Westinghouse, Model No. 501FD, Natural Gas- Fired Combustion Turbine, Serial No. 37A8191. The Turbine is Rated at 1785 MMBtu/hr (HHV at ISO conditions). The turbine is operated in combined cycle mode only and the heat recovery steam generator (HRSG) is equipped with a duct burner rated at 675 MMBtu/hr. The turbine drives a generator capable of generating 152 MW of power and the HRSG drives a steam generator rated at 326 MW (at peak capacity).	March 2004	Dry Low NO <sub>X</sub> (DLN) Combustion Systems and Selective Catalytic Reduction (SCR) for NO <sub>X</sub> and Oxidation Catalyst for CO and VOC.
S002 / CT- 02	002	One (1) Westinghouse, Model No. 501FD, Natural Gas- Fired Combustion Turbine, Serial No. 37A8196. The Turbine is Rated at 1785 MMBtu/hr (HHV at ISO conditions). The turbine is operated in combined cycle mode only and the heat recovery steam generator (HRSG) is equipped with a duct burner rated at 675 MMBtu/hr. The turbine drives a generator capable of generating 152 MW of power and the HRSG drives a steam generator rated at 326 MW (at peak capacity).	March 2004	Dry Low NO <sub>X</sub> (DLN) Combustion Systems and Selective Catalytic Reduction (SCR) for NO <sub>X</sub> and Oxidation Catalyst for CO and VOC.
S005	005	Caterpillar, Model No. 3512B, Diesel Fired Internal Combustion Engine Driving an Emergency Generator, Serial No. 1GZ01360. The Engine is Diesel Fuel-Fired and rated at 1810 hp and 12.2 MMBtu/hr.	March 2004	Uncontrolled
S004	004	Rentech, Natural Gas Fired Boiler, Rated at 129 MMBtu/hr, Serial No. 2002-49.	February 2004	Low NO <sub>X</sub> Burners
S006	006	Marley, Model No. F4910, 12 Cell Cooling Water Tower, Rated at 176,000 gal/min.	March 2004	Drift Eliminators
M001	N/A	Cold Cleaner Solvent Vat		Uncontrolled
M002	N/A	Gasoline Storage Tank, 500 gallons, aboveground		Uncontrolled
M003	N/A	John Deere, Model No. 6081AF001, Serial No. RG6081A159985, Diesel Fired Internal Combustion Engine Driving an Emergency Fire Pump Engine, Rated at 182 hp and 1.26 MMBtu/hr.	March 2004	Uncontrolled

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#### **SECTION II - Specific Permit Terms**

## 1. Units S001 & S002 – Two (2) Natural Gas Fired Combustion Turbines Each Equipped with a HRSG and Duct Burner

#### Unless Otherwise Specified Limits are for **Both** Turbines/HRSGs/Duct Burners

Parameter	Permit Condition	Lin	nitations	Compliance Emission	Monitoring		
	Number	Short Term	Long Term	Factor	Method	Interval	
BACT Requirements	1.1	See Condition 1.1.		N/A	See Condition 1.1.		
PM/PM <sub>10</sub> 1.2.	N/A	126.8 tons/yr	CT-01: PM 0.0036 lb/MMBtu PM <sub>10</sub> 0.0036 lb/MMBtu CT-02: PM 0.0045 lb/MMBtu PM <sub>10</sub> 0.0045 lb/MMBtu	Recordkeeping and Calculation	Monthly		
		For Each Turbine/HRSG/duct burner: 0.00735 lbs/MMBtu, the average of three (3) test runs		N/A	See Condit	ion 1.2.	
VOC	1.3.	N/A	50.6 tons/yr	Unit 1 - 7.3 x 10 <sup>-4</sup> lb/MMBtu Unit 2 - 1.5 x 10 <sup>-4</sup> lb/MMBtu	Recordkeeping and Calculation	Monthly	
		For Each Turbine/HRSG/duct burner: 0.00293 lbs/MMBtu, the average of three (3), 1-hr tests		N/A	See Condit	ion 1.3.	

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Parameter Permit Condition		Limitations		Compliance Emission	Monitoring		
	Number		Long Term	Factor	Method	Interval	
SO <sub>2</sub>	1.4.	N/A	11.8 tons/yr	N/A	40 CFR Part 75, Appendix D	As specified in 40 CFR Part 75, Appendix D	
		For Each Turbine: 150 ppmvd @ 15% O <sub>2</sub> OR Use of Fuel Which Contains Less than 0.8 Weight % Sulfur		N/A	Fuel Restriction	Only Pipeline Quality Natural Gas is Used as Fuel	
		lbs/MMBtu, o	Turbine: 0.35 on a 3-hour rolling verage				
		For Each Duct Burner: 0.20 lbs/MMBtu, on a 30-Day Rolling Average					
NO <sub>X</sub>	1.5.	For Each Turbine/HRSG/Duct Burner:  3 ppmvd @ 15% O <sub>2</sub> on a 1-hr average, except as provided for below During Startup and Shutdown: 300 ppmvd @ 15% O <sub>2</sub> averaged over the startup and/or shutdown period. During Combustion Tuning and Testing (not to exceed 60 hrs/yr per for both turbines/HRSGs/Duct Burners combined): 300 ppmvd @ 15% O <sub>2</sub> on a 1-hr average.		N/A	Continuous Emission Monitoring System	Continuously	
		N/A	240.4 tons/yr				

Parameter	Parameter Permit Condition		nitations	Compliance Emission	Monito	Monitoring		
	Number	Short Term	Long Term	Factor	Method	Interval		
СО	1.6.	Burner:  9 ppmvd @ 159 average, except below During Startup 1,000 ppmvd @ over the startup period During Combus Testing (not to a for both turbin Burners combi	as provided for and Shutdown: 0.15% O <sub>2</sub> averaged and/or shutdown stion Tuning and exceed 60 hrs/yr per nes/HRSGs/Duct	N/A	Continuous Emission Monitoring System	Continuously		
Natural Gas Consumption	1.7.	N/A	32,625 MMscf/yr	N/A	Recordkeeping	Monthly		
Continuous Emission Monitoring System Requirements	1.8.	N/A	N/A	N/A	See Condition 1.8.			
Fuel Flow Meter	1.9.	N/A	N/A	N/A	See Condi	tion 1.9.		
Sulfur Content of Fuel	1.10.	sulfur conten	y Natural Gas (total t not to exceed 0.5 s/100 SCF)	N/A	See Condition 1.10.			
NSPS General Provisions	1.11.	N/A	N/A	N/A	As Required by NSPS General Provisions	Subject to NSPS General Provisions		

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Parameter	Permit Condition	Lim	nitations	Compliance Emission	Monitoring		
	Number	Short Term	Long Term	Factor	Method	Interval	
Opacity	1.12.		State Only Requirement: Not to Exceed 20%		Fuel Restriction	Only Natural Gas is Used as	
		Not to Exceed 20% (6-minute average), Except for One Six Minute Average Not to Exceed 27% Per Hour				Fuel	
			d 20% Except as d for Below				
		For Certain Operational Activities - Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes					
Compliance Assurance Monitoring Requirements	1.13.	N/A	N/A	N/A	See Condition 1.13.		
Acid Rain Requirements	1.14.	See	e Section III of this Pe	rmit	Certification	Annually	

- 1.1 The turbines/HRSGs/duct burners are subject to the requirements of the prevention of Significant Deterioration (PSD) Program. Best Available Control Technology (BACT) shall be applied for control of Nitrogen Oxides (NO<sub>X</sub>), Carbon Monoxide (CO), Particulate Matter (PM and PM<sub>10</sub>) and Volatile Organic Compounds. BACT has been determined as follows:
  - 1.1.1 BACT for  $NO_X$  has been determined to be dry low  $NO_X$  (DLN) combustion system and selective catalytic reduction (SCF) with the emission limits identified in Condition 1.5.1 (Colorado Construction Permit 02WE0228).
  - 1.1.2 BACT for CO has been determined to be good combustion practices and an oxidation catalyst with the emission limits identified in Condition 1.6.1 (Colorado Construction Permit 02WE0228).
  - 1.1.3 BACT for PM and PM<sub>10</sub> has been determined to be use of pipeline quality natural gas as fuel, good combustion practices with the emission limitations identified in Condition 1.2.2 (Colorado Construction Permit 02WE0228).
  - 1.1.4 BACT for VOC has been determined to be use of pipeline quality natural gas as fuel, good combustion practices and an oxidation catalyst with the emission limitations identified in Condition 1.3.2 (Colorado Construction Permit 02WE0228).

- 1.2 PM and  $PM_{10}$  emissions are subject to the following requirements:
  - 1.2.1 **Total** Annual emissions of PM and PM<sub>10</sub> **from both turbines/HRSGs/duct burners together** shall not exceed 126.8 tons/yr (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 3.1 to set emission units for individual equipment instead of a facility wide total). Monthly emissions **from each turbine/HRSG/duct burner** shall be calculated by the end of the subsequent month using the above emission factors (from performance tests conducted September 8 and 9, 2011) and the heat input for the month as recorded on the data acquisition and handling system (DAHS) for the continuous emission monitoring system (required by Condition 1.8) in the following equation:

tons/mo = (EF, lbs/MMBtu) x heat input (MMBtu/mo) 2000 lbs/ton

Monthly emissions from **each turbine/HRSG/duct burner** shall be summed together and used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 1.2.2 For purposes of BACT, Total (filterable plus condensable) Particulate Matter (PM) and Particulate Matter less than 10 microns (PM<sub>10</sub>) emissions **from each turbine/HRSG/duct burner** shall not exceed 0.00735 lbs/MMBtu, based on the average of three (3) one-hour test runs (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3 to specify the averaging time). Compliance with the PM and PM<sub>10</sub> BACT limits shall be monitored as follows:
  - 1.2.2.1 In the absence of credible evidence to the contrary, compliance with the particulate matter emission limits is presumed since only pipeline quality natural gas that meets the requirements in Condition 1.10 is permitted to be used as fuel in the turbines and duct burners.
  - 1.2.2.2 Performance tests shall be conducted every five (5) years to monitor compliance with the PM and PM<sub>10</sub> emission limitations. Performance test shall be conducted in accordance with the requirements of 40 CFR Part 60 Subpart A § 60.8 using EPA Test Methods 5 and 202.

Note that previous performance tests for these units were conducted on September 8 and 9, 2011.

A stack testing protocol shall be submitted for Division approval at least thirty (30) calendar days prior to performance of the test required under this condition. No stack test required herein shall be performed without prior written approval of the protocol by the Division. The Division reserves the right to witness the test. In order to facilitate the Division's

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ability to make plans to witness the test, notice of the date (s) for the stack test shall be submitted to the Division at least thirty (30) calendar days prior to the test. The Division may for good cause shown, waive this thirty (30) day notice requirement. In instances when a scheduling conflict is presented, the Division shall immediately contact the permittee in order to explore the possibility of making modifications to the stack test schedule. The required number of copies of the compliance test results shall be submitted to the Division within forty-five (45) calendar days of the completion of the test unless a longer period is approved by the Division.

- 1.3 VOC emissions are subject to the following requirements:
  - 1.3.1 **Total** Annual emissions of VOC **from both turbines/HRSGS/duct burners together** shall not exceed 50.6 tons/yr (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3 to set emission units for individual equipment instead of a facility wide total). Monthly emissions **from each turbine/HRSG/duct burner** shall be calculated by the end of the subsequent month using the above emission factors (from performance tests conducted May and September 2004) and the heat input for the month as recorded on the DAHS for the continuous emission monitoring system (required by Condition 1.8) in the following equation:

tons/mo = (EF, lbs/MMBtu) x heat input (MMBtu/mo) 2000 lbs/ton

Monthly emissions **from each turbine/HRSG/duct burner** shall be summed together and used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 1.3.2 For purposes of BACT, VOC emissions from each turbine/HRSG/duct burner shall not exceed 0.00293 lb/MMBtu, based on the average of three (3) one-hour test runs (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3 to specify the averaging time). In the absence of credible evidence to the contrary, compliance with the VOC BACT emission limit is presumed provided the requirements in Condition 1.6.1 (CO BACT limits) are met.
- 1.4 Sulfur Dioxide (SO<sub>2</sub>) emissions shall not exceed the following limitations:
  - 1.4.1 **Total** Annual Sulfur Dioxide (SO<sub>2</sub>) emissions **from both turbines/HRSGs/Duct Burner together** shall not exceed 11.8 tons/yr (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3 to set emission units for individual equipment instead of a facility wide total). Compliance

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with the annual SO<sub>2</sub> emission limitations shall be monitored using the monitoring method specified in 40 CFR Part 75 Appendix D.

Monthly emissions **from each turbine/HRSG/duct burner** shall be summed together and used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 1.4.2 **Each turbine** shall meet one of the following requirements:
  - 1.4.2.1 Sulfur Dioxide (SO<sub>2</sub>) emissions from each turbine shall not exceed 150 ppmvd at 15% O<sub>2</sub> **OR**
  - 1.4.2.2 No fuel, which contains sulfur in excess of 0.8 percent by weight, shall be used in these combustion turbines (40 CFR Part 60 Subpart GG §§ 60.333(a) & (b), as adopted by reference in Colorado Regulation No. 6, Part A).

Compliance with the above requirements is presumed, in the absence of evidence to the contrary, since only pipeline quality natural gas that meets the requirements in Condition 1.10 is permitted to be used as fuel in these turbines.

- 1.4.3 Sulfur Dioxide (SO<sub>2</sub>) emissions **from each turbine** shall not exceed 0.35 lbs/MMBtu, on a 3-hr rolling average (Colorado Regulation No. 1, Section VI.B.4.c.(ii) and VI.B.2). In the absence of credible evidence to the contrary, compliance with the SO<sub>2</sub> limitations is presumed since only pipeline quality natural gas that meets the requirements in Condition 1.10 is permitted to be used as fuel in these turbines.
- 1.4.4 Sulfur Dioxide (SO<sub>2</sub>) emissions **from each duct burner** shall not exceed 0.20 lbs/MMBtu on a 30-day rolling average (40 CFR Part 60 Subpart Da § 60.43a(b)(2), as adopted by reference in Colorado Regulation No. 6, Part A). In the absence of credible evidence to the contrary, compliance with the sulfur dioxide limitations is presumed, since only pipeline quality natural gas that meets the requirements in Condition 1.10 is permitted to be used as fuel in these duct burners.
- 1.5 Emissions of Nitrogen Oxides (NO<sub>X</sub>) shall not exceed the following limitations:
  - 1.5.1 For purposes of BACT, Nitrogen Oxide (NO<sub>X</sub>) emissions **from each turbine/HRSG/duct burner** shall not exceed the following limitations (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3 to revise the definitions of startup and shutdown):
    - 1.5.1.1 Except as provided for below, emissions of  $NO_X$  shall not exceed 3 ppmvd at 15%  $O_2$ , on a 1-hour average.

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- 1.5.1.2 During periods of startup and shutdown, emissions of  $NO_X$  shall not exceed 300 ppmvd at 15%  $O_2$ , as averaged over the duration of the startup and/or shutdown period.
- 1.5.1.3 During periods of combustion tuning and testing, emissions of NO<sub>X</sub> shall not exceed 300 ppmvd at 15% O<sub>2</sub>, on a 1-hour average. Use of this NO<sub>X</sub> emission limit for purposes of combustion tuning and/or testing shall not exceed 60 hours in any calendar year **for both turbines/HRSGs/duct burners combined**. Records of the number of hours each turbine/HRSG/duct burner undergoes combustion tuning and/or testing shall be recorded and maintained and made available to the Division upon request.
- 1.5.1.4 "Startup" means the setting in operation of any air pollution source for any purpose. Setting in operation for these turbines begins when flame is detected in the turbine. Setting in operation for these turbines ends 30 minutes after the turbine reaches Stage-C operation.
- 1.5.1.5 "Shutdown" means the cessation of operation of any air pollution source for any purpose. The cessation of operation for these turbines begins when the command signal is initiated to shutdown the unit and ends when fuel is no longer being fired in the turbine.
- 1.5.1.6 "Combustion Tuning and Testing" means the operation of the unit for the purpose of performing combustion tuning and testing operations after a unit overhaul or as part of routine maintenance operations. Combustion tuning and testing can occur throughout the range of the operating conditions.

Compliance with the  $NO_X$  BACT emission limitations shall be monitored using the continuous emission monitoring systems (CEMS) required by Condition 1.8, as follows:

- 1.5.1.7 Except as provided for in Condition 1.5.1.6, all the CEMS concentration (ppm) data points, excluding startup and shutdown data points shall, at the end of each clock hour, be summarized to generate the one-hour average NO<sub>X</sub> concentration in accordance with the requirements in 40 CFR Part 75. Data used to generate the one-hour average NO<sub>X</sub> concentration shall not include replaced data, nor shall the data be bias-adjusted. Replaced data shall be reported as monitor down time in the semi-annual reports required by Condition 6.5. Each clock hour average NO<sub>X</sub> concentration shall be compared to the limitations in Conditions 1.5.1.1 or 1.5.1.3, as appropriate.
- 1.5.1.8 All concentration data points within the startup and/or shutdown period shall be averaged together to generate the average NO<sub>X</sub> concentration for a given startup and/or shutdown period. Data used to generate the average

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 $NO_X$  concentration during the startup and/or shutdown period shall not include replaced data, nor shall the data be bias-adjusted. Replaced data shall be reported as monitor down time in the semi-annual reports required by Condition 6.5. The average  $NO_X$  concentration for each startup and shutdown period shall be compared to the limitation in Condition 1.5.1.2.

In the event that the startup ends within a clock hour or the shutdown begins within a clock hour, all non-startup and/or non-shutdown concentration (ppm) data points within that clock hour shall be averaged together to generate the average  $NO_X$  concentration in accordance with the requirements in 40 CFR Part 75 and that average concentration shall be compared to the limitations in Conditions 1.5.1.1 or 1.5.1.3, as appropriate.

- 1.5.1.9 The emission limitation in Condition 1.5.1.3 applies to any clock hour in which combustion tuning and testing activities occur.
- 1.5.2 **Total** Annual emissions of NO<sub>X</sub> **from both turbines/HRSGs/duct burners together** shall not exceed 240.4 tons/year (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3 to set emission units for individual equipment instead of a facility wide total). For any hour in which fuel is combusted in the turbines/HRSGs/duct burners, the permittee shall program the DAHs to calculate lb/hr NO<sub>X</sub> emissions in accordance with the requirements in Condition 6.1.1.4.b of this permit and 40 CFR Part 75, including any replaced data and the data shall be bias-adjusted, if warranted.

Specifically hourly mass  $NO_X$  emissions (in lb/hr) shall be calculated by multiplying the hourly  $NO_X$  lb/MMBtu value (which includes replaced or bias-adjusted data, as applicable) by the hourly heat input value (MMBtu/hr) (which includes replaced data from the fuel flow measurement, as applicable). The hourly  $NO_X$  lb/MMBtu and heat input values shall be determined using equations F-5 and F-20 in Appendix F of 40 CFR Part 75. The resulting  $NO_X$  lb/hr value is then multiplied by the unit operating time for that hour to produce a  $NO_X$  lbs value. Hourly  $NO_X$  mass emissions (lbs) shall be summed and divided by 2000 lb/ton to determine monthly  $NO_X$  emissions (in tons).

Monthly emissions (in tons) **from each turbine/HRSG/duct burner** shall be summed together and used in a twelve month rolling total to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

- 1.6 Emissions of Carbon Monoxide (CO) shall not exceed the following limitations:
  - 1.6.1 For purposes of BACT, Carbon Monoxide (CO) emissions **from each turbine/HRSG/duct burner** shall not exceed the following limitations (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I,

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Condition 1.3 to revise the definition of startup and shutdown and to remove the limit for CO during the 1<sup>st</sup> hour of a cold startup):

- 1.6.1.1 Except as provided for below, emissions of CO shall not exceed 9 ppmvd at 15% O<sub>2</sub>, on a 1-hour average.
- 1.6.1.2 During periods of startup and shutdown, emissions of CO shall not exceed 1,000 ppmvd at 15% O<sub>2</sub>, as averaged over the duration of the startup and/or shutdown period.
- 1.6.1.3 During periods of combustion tuning and testing, emissions of CO shall not exceed 1,000 ppmvd at 15% O<sub>2</sub>, on a 1-hour average. Use of this CO emission limit for purposes of combustion tuning and/or testing shall not exceed 60 hours in any calendar year **for both turbines/HRSGs/duct burners combined**. Records of the number of hours each turbine/HRSG/duct burner undergoes combustion tuning and/or testing shall be recorded and maintained and made available to the Division upon request.
- 1.6.1.4 "Startup" shall have the same definition as in Condition 1.5.1.3.
- 1.6.1.5 "Shutdown" shall have the same definition as in Condition 1.5.1.4.
- 1.6.1.6 "Combustion Tuning and Testing" shall have the same definition as provided for in Condition 1.5.1.6.

Compliance with the CO BACT emission limitations shall be monitored the CEMS required by Condition 1.8, as follows:

- 1.6.1.7 Except as provided for in Condition 1.6.1.6, all the CEMS concentration (ppm) data points, excluding startup and shutdown data points shall, at the end of each clock hour, be summarized to generate the one-hour average CO concentration in accordance with the requirements in 40 CFR Part 75. Data used to generate the one-hour average CO concentration shall not include replaced data, nor shall the data be bias-adjusted. Replaced data shall be reported as monitor down time in the semi-annual reports required by Condition 6.5. Each clock hour average CO concentration shall be compared to the limitations in Conditions 1.6.1.1 or 1.6.1.3, as appropriate.
- 1.6.1.8 All concentration (ppm) data points within the startup and/or shutdown period shall be averaged together to generate the average CO concentration for a given startup and/or shutdown period. Data used to generate the average CO concentration during the startup and/or shutdown period shall not include replaced data, nor shall the data be bias-adjusted. Replaced data shall be reported as monitor down time in the semi-annual reports required by Condition 6.5. The average CO concentration for each

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startup and shutdown period shall be compared to the limitation in Condition 1.6.1.2.

In the event that the startup ends within a clock hour or the shutdown begins within a clock hour, all non-startup and/or non-shutdown concentration (ppm) data points within that clock hour shall be averaged together to generate the average CO concentration in accordance with the requirements in 40 CFR Part 75 and that average concentration shall be compared to the limitations in Conditions 1.6.1.1 or 1.6.1.3, as appropriate.

- 1.6.1.9 The emission limitation in Condition 1.6.1.3 applies to any clock hour in which combustion turning and testing activities occur.
- 1.6.2 **Total** Annual emissions of CO **from both turbines/HRSGs/duct burners together** shall not exceed 782.2 tons/yr (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3, to set emission units for individual equipment instead of a facility wide total). For any hour in which fuel is combusted in the turbines/HRSGs/duct burners, the permittee shall program the DAHs to calculate lb/hr CO emissions in accordance with the requirements in Condition 6.1.1.4.b of this permit and 40 CFR Part 75, including any replaced data, if warranted.

Specifically hourly mass CO emissions (in lb/hr) shall be calculated by multiplying the hourly CO lb/MMBtu value (which includes replaced date in accordance with the provisions in Part 75 for  $NO_X$  replacement, as applicable) by the hourly heat input value (MMBtu/hr) (which includes replaced data from the stack flow measurement, as applicable). The hourly CO lb/MMBtu and heat input values shall be determined using equations F-5 (for  $NO_X$ ) and F-20 in Appendix F of 40 CFR Part 75. The resulted CO lb/hr value is then multiplied by the unit operating time for that hour to produce a CO lbs value. Hourly CO mass emissions (lbs) shall be summed and divided by 2000 lb/ton to determine monthly CO emissions (in tons).

Monthly emissions (in tons) **from each turbine/HRSG/duct burner** shall be summed together and used in a twelve month rolling total of emissions to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months total.

1.7 **Total** natural gas consumption **for both turbines/HRSGs/duct burners together** shall not exceed the above limitations (Colorado Construction Permit 02WE0228). The natural gas consumption **for each turbine/HRGS/duct burner** shall be monitored and recorded monthly using the fuel flow meters required by Condition 1.9. Monthly natural gas fuel consumption **for each turbine/HRSG/duct burner** shall be summed together and used in a rolling twelve month total to monitor compliance with the annual limitation. Each month a new twelve month rolling total shall be calculated using the previous twelve months data.

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- 1.8 **Each** of the turbine/HRSG/duct burner exhaust stacks shall be equipped with a continuous emission monitoring system to measure and record the following:
  - 1.8.1 Concentration of Oxides of Nitrogen; ppmvd corrected to 15 % O<sub>2</sub>, hourly average;
  - 1.8.2 Emissions of Oxides of Nitrogen; pounds per hour, tons per month;
  - 1.8.3 Concentration of Carbon Monoxide; ppmvd corrected to 15% O<sub>2</sub>, hourly average;
  - 1.8.4 Emissions of Carbon Monoxide, pounds per hour, tons per month;
  - 1.8.5 Concentration of Oxygen, percent hourly average;
  - 1.8.6 Operating mode startup, shutdown and/or standard operation; and

The continuous emission monitoring systems shall meet the requirements in Condition 6 of this permit. Monthly emissions of  $NO_X$  and CO from the continuous emission monitoring system shall be used as specified by Conditions 1.5.2 and 1.6.2 to monitor compliance with the annual  $NO_X$  and CO emission limitations.

- 1.9 **Each turbine/HRSG/duct burner** shall be equipped with an in-line fuel flow meter that meets the requirements in 40 CFR Part 75 Appendix D to measure fuel combusted in each turbine. Fuel flow data shall be recorded on a data acquisition and handling system as specified in 40 CFR Part 75 Appendix D (Colorado Construction Permit 02WE0228).
- 1.10 The permittee shall maintain records demonstrating that the natural gas burned meets the definition of pipeline quality natural gas as defined in 40 CFR Part 72. Specifically, the permittee shall demonstrate that the natural gas burned has a total sulfur content less than 0.5 grains/100 SCF. The demonstration shall be made using any of the methods identified in 40 CFR Part 75 Appendix D, Section 2.3.1.4. These records shall be made available to the Division upon request.
- 1.11 Regulation No. 6, Part A, Subpart A, General Provisions apply as follows:
  - 1.11.1 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gasses discharged to the atmosphere. (Colorado Construction Permit 01AD0575 and 40 CFR Part 60 Subpart A § 60.12, as adopted by reference in Colorado Regulation No. 6, Part A)
  - 1.11.2 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good

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air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source (Colorado Construction Permit 01AD0575 and 40 CFR Part 60 Subpart A § 60.11(d), as adopted by Regulation No. 6, Part A).

- 1.12 The turbines/HRSGs/duct burners are subject to the following opacity requirements:
  - 1.12.1 **State-Only Requirement:** No owner or operator may discharge, or cause the discharge into the atmosphere of any particulate matter which is greater than 20% opacity (Colorado Regulation No. 6, Part B, Section II.C.3). This opacity standard applies to **each turbine/HRGS/duct burner.**

This opacity standard applies at all times except during periods of startup, shutdown and malfunction (40 CFR Part 60 Subpart A § 60.11(c), as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A).

Note that this opacity requirement is more stringent than the opacity requirement in Conditions 1.12.2 and 1.12.4 during periods of building of a new fire, cleaning of fire boxes, soot blowing, process modifications and adjustment or occasional cleaning of control equipment.

1.12.2 No owner or operator of a source shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity ((40 CFR Part 60 Subpart Da § 60.42a(b), as adopted by reference in Colorado Regulation No. 6, Part A and Colorado Construction Permit 99WE0762 PSD). This opacity standard applies to **each duct burner.** 

This opacity standard applies at all times except during periods of startup, shutdown and malfunction (40 CFR Part 60 Subpart A § 60.11(c), as adopted by reference in Colorado Regulation No. 6, Part A).

Note that this opacity requirement is more stringent than the opacity requirement in Condition 1.12.4 during periods of building of a new fire, cleaning of fire boxes, soot blowing, process modifications and adjustment or occasional cleaning of control equipment.

1.12.3 Except as provided for in Condition 1.12.4 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity (Colorado Construction Permit 02WE0228 and Colorado Regulation No. 1, Section II.A.1). This opacity standard applies to **each turbine/HRGS/duct burner**.

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1.12.4 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, process modifications, or adjustment or occasional cleaning of control equipment which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Construction Permit 02WE0228 and Colorado Regulation No. 1, Section II.A.4). This opacity standard applies to **each turbine/HRGS/duct burner**.

In the absence of credible evidence to the contrary, each turbine shall be presumed to be in compliance with the above opacity requirements whenever natural gas is used as fuel.

- 1.13 The Compliance Assurance Monitoring (CAM) requirements in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV, apply with respect to the VOC, NO<sub>X</sub> and CO emission limitations identified in Conditions 1.3, 1.5 and 1.6 as follows:
  - 1.13.1 The permittee shall monitor the exhaust gas NO<sub>X</sub> and CO concentration (ppmvd at 15% O<sub>2</sub>) and mass (lbs/hr) emissions using the continuous emission monitoring system required by Condition 1.8.
    - 1.13.1.1 With respect to the NO<sub>X</sub> and CO emission limitations, exceedances, for purposes of CAM, shall be
      - Any 1-hr period that the NO<sub>X</sub> and/or CO concentration exceeds the limits identified in Condition 1.5.1.1 and 1.6.1.1;
      - Any NO<sub>X</sub> and/or CO concentration average over either a startup b. and/or shutdown period that exceeds the limits identified in Conditions 1.5.1.2 and 1.6.1.2; and
      - Any twelve month period that NO<sub>x</sub> and/or CO emissions (tons/yr) c. exceeds the limits identified in Condition 1.5.2 and 1.6.2.
    - 1.13.1.2 With respect to the VOC emissions limitations, excursions for the purposes of CAM, shall be:
      - Any 1-hr period that the CO concentration exceeds the limit identified in Condition 1.6.1.1;
      - b. Any CO concentration average over either a startup and/or shutdown period that exceeds the limit identified in Condition 1.6.1.2; and
      - Any twelve month period that CO emissions (tons/yr) exceed the c. limit identified in Condition 1.6.2.
    - Exceedances and/or excursions shall be reported as required by Section II, 1.13.1.3 Condition 6.5 and Section V, Conditions 21 and 22.d of this permit.
  - 1.13.2 Operation of Approved Monitoring

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- 1.13.2.1 At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment (40 CFR Part 64 § 64.7(b), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- Except for, as applicable, monitoring malfunctions, associated repairs, and 1.13.2.2 required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of these CAM requirements, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions (40 CFR Part 64 § 64.7(c), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

#### 1.13.2.3 Response to excursions or exceedances

- Upon detecting an excursion or exceedance, the owner or operator a. shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable (40 CFR Part 64 § 64.7(d)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- b. Determination of whether the owner of operator has used acceptable procedures in response to an excursion or exceedance

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will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process (40 CFR Part 64 § 64.7(d)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

- 1.13.2.4 After approval of the monitoring required under the CAM requirements, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Division and, if necessary submit a proposed modification for this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters (40 CFR Part 64 § 64.7(e), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.13.3 Quality Improvement Plan (QIP) Requirements
  - 1.13.3.1 Based on the results of a determination made under the provisions of Condition 1.13.2.3.b, the Division may require the owner or operator to develop and implement a QIP (40 CFR Part 64 § 64.8(a), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
  - 1.13.3.2 The owner or operator shall maintain a written QIP, if required, and have it available for inspection (40 CFR Part 64 § 64.8(b)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
  - 1.13.3.3 The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
    - a. Improved preventative maintenance practices (40 CFR Part 64 § 64.8(b)(2)(i), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
    - b. Process operation changes (40 CFR Part 64 § 64.8(b)(2)(ii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

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- c. Appropriate improvements to control methods (40 CFR Part 64 § 64.8(b)(2)(iii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- d. Other steps appropriate to correct control performance (40 CFR Part 64 § 64.8(b)(2)(iv), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- e. More frequent or improved monitoring (only in conjunction with one or more steps under Conditions 2.9.3.3.a through d above) (40 CFR Part 64 § 64.8(b)(2)(v), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.13.3.4 If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Division if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined (40 CFR Part 64 § 64.8(c), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.13.3.5 Following implementation of a QIP, upon any subsequent determination pursuant to Condition 1.13.2.3.b, the Division or the U.S. EPA may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:
  - a. Failed to address the cause of the control device performance problems (40 CFR Part 64 § 64.8(d)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV); or
  - b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions (40 CFR Part 64 § 64.8(d)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.13.3.6 Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the federal clean air act (40 CFR Part 64 § 64.8(e), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.13.4 Reporting and Recordkeeping Requirements
  - 1.13.4.1 <u>Reporting Requirements:</u> The reports required by Section V, Condition 22.d, shall contain the information specified in Appendix B of the permit and the following information, as applicable:

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- a. Summary information on the number, duration and cause (including unknown cause, if applicable), for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable) ((40 CFR Part 64 § 64.9(a)(2)(ii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV); and
- b. The owner or operator shall submit, if necessary, a description of the actions taken to implement a QIP during the reporting period as specified in Condition 1.13.3 of this permit. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring (40 CFR Part 64 § 64.9(a)(2)(iii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.13.4.2 <u>General Recordkeeping Requirements</u>: In addition to the recordkeeping requirements in Section V, Condition 22.a through c.
  - a. The owner or operator shall maintain records of any written QIP required pursuant to Condition 1.13.3 and any activities undertaken to implement a QIP, and any supporting information required to be maintained under these CAM requirements (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions) (40 CFR Part 64 § 64.9(b)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
  - b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements (40 CFR Part 64 § 64.9(b)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

#### 1.13.5 Savings Provisions

1.13.5.1 Nothing in these CAM requirements shall excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the federal clean air act. These CAM requirements shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal

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authority and are not intended to establish minimum requirements for the purposes of determining the monitoring to be imposed under separate authority under the federal clean air act, including monitoring in permits issued pursuant to title I of the federal clean air act. The purpose of the CAM requirements is to require, as part of the issuance of this Title V operating permit, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of CAM (40 CFR Part 64 § 64.10(a)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

- 1.13.5.2 Nothing in these CAM requirements shall restrict or abrogate the authority of the U.S. EPA or the Division to impose additional or more stringent monitoring, recordkeeping, testing or reporting requirements on any owner or operator of a source under any provision of the federal clean air act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable (40 CFR Part 64 § 64.10(a)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.13.5.3 Nothing in these CAM requirements shall restrict or abrogate the authority of the U.S. EPA or the Division to take any enforcement action under the federal clean air act for any violation of an applicable requirement or of any person to take action under section 304 of the federal clean air act (40 CFR Part 64 § 64.10(a)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.14 These units are subject to the Title IV Acid Rain Requirements. As specified in 40 CFR Part 72.72(b)(1)(viii), the acid rain permit requirements shall be complete and segregable portion of the Operating Permit. As such the requirements are found in Section III of this permit.

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#### 2. Diesel Fuel Fired Emergency Engines

#### S005- Emergency Generator Rated at 1,810 hp

Parameter Permit Condition		Limitations		Compliance Emission Factor	Monit	Monitoring	
	Number	Short Term	Long Term		Method	Interval	
NO <sub>X</sub>	2.1.	N/A	N/A	6.9 g/hp-hr	Recordkeeping and Calculation	Annually, if Hours of Operation	
СО		N/A	N/A	8.5 g/hp-hr		Exceed 100	
Hours of Operation	2.2.	N/A	N/A	N/A	Recordkeeping	Annually	
$SO_2$	2.3.	0.8 lbs/MMBtu		N/A	Fuel Restriction	Only Diesel Fuel is Used as Fuel	
Opacity	2.4.	Not to Exceed 20% Except as Provided for Below		N/A	EPA Method 9	See Condition 2.4	
		30%, for a Per Aggregating M Minutes in any	Not to Exceed riod or Periods ore than Six (6) 60 Consecutive tutes				
MACT ZZZZ Requirements	2.5.	Change Oil and Filter Inspect Air Cleaner Inspect all Hoses and Belts		N/A	See Cond	ition 2.5	
MACT General Provisions	2.6.	N/A	N/A	N/A	N/A See Condition 2.		

#### M003- Emergency Fire Pump Engine Rated at 182 hp

Parameter	Permit Condition	Limitations		Compliance Emission Factor	Monite	oring
	Number	Short Term	Long Term		Method	Interval
$SO_2$	2.3	0.8 lbs/MMBtu		N/A	Fuel Restriction	Only Diesel Fuel is Used as Fuel
Opacity	2.4	Not to Exceed 2 Provided for		N/A	EPA Method 9	See Condition 2.4
		For Startup – Not to 30%, for a Period or Aggregating More tha Minutes in any 60 Cor Minutes				

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Parameter	Permit Condition	Limitations		Compliance Emission Factor	Mon	nitoring
	Number	Short Term	Long Term		Method	Interval
MACT ZZZZ Requirements	2.5.	Change Oil and Filter Inspect Air Cleaner Inspect all Hoses and Belts		N/A	See Co	ndition 2.5
MACT General Provisions	2.6	N/A	N/A	N/A	See Co	ndition 2.6

Note that this emission unit is exempt from the APEN reporting requirements in Regulation No. 3, Part A and the construction permit requirements in Regulation No. 3, Part B.

2.1 The emission factors listed above (from the manufacturer) have been approved by the Division and shall be used to calculate emissions **from the emergency generator**. If hours of operation for this engine exceed 100 hours in any calendar year, annual emissions of Nitrogen Oxide  $(NO_X)$  and Carbon Monoxide (CO) emissions for purposes of APEN reporting and payment of annual fees shall be determined using the above emission factors, the maximum horsepower (1,810 hp) and the hours of operation (as required by Condition 2.2) the following equation:

Tons/yr =  $\underline{[EF (g/hp-hr) x hour of operation (hrs/yr) x maximum hp]}$  [(453.6 g/lb) x (2000 lbs/ton)]

2.2 Hours of operation **for the emergency generator** shall be monitored annually and recorded in a log to be made available to the Division upon request. Recorded data shall be used to calculate emissions as required by Condition 2.1.

Note that if annual hours of operation exceed 250 hours in any year, the engine is no longer exempt from the permitting requirements in Colorado Regulation No. 3, Part B and the permittee shall submit an application to revise this permit within 30 days in order to include the appropriate applicable requirements.

- 2.3 Sulfur Dioxide (SO<sub>2</sub>) emissions **from each engine** shall not exceed 0.8 lbs/MMBtu (Colorado Regulation No. 1, Section VI.B.4.b.(i)). In the absence of credible evidence to the contrary, compliance with the SO<sub>2</sub> emission limitation shall be presumed since only diesel fuel is permitted to be used as fuel in these engines. The permittee shall maintain records that verify that only diesel fuel is used as fuel in these engines.
- 2.4 Opacity of emissions **from each engine** shall not exceed the following:
  - 2.4.1 Except as provided for in Condition 2.4.2 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity (Colorado Regulation No. 1, Section II.A.1).
  - 2.4.2 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from startup which is in excess of 30% opacity

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for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).

Compliance with these limitations shall be monitored by conducting opacity observations in accordance with EPA Reference Method 9 as follows:

- As specified in Conditions 2.5.2.4 and 2.5.7 engine startup shall not exceed 30 minutes. An engine startup period of less than 30 minutes shall not require an opacity observation to monitor compliance with the opacity limit in Condition 2.4.2. A record shall be kept of the date and time each engine was started and when it was shutdown.
- An opacity observation shall be conducted annually (calendar year period) **on each engine** to monitor compliance with the opacity limit in Condition 2.4.1. If an engine
  is operated more than 250 hours in any calendar year period, a second opacity
  observation shall be conducted. If two opacity readings are conducted in the annual
  (calendar year) period, such readings shall be conducted at least thirty days apart.
  Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible
  evidence to the contrary, exceedance of the limit shall be considered to exist from the
  time a Method 9 reading is taken that shows an exceedance of the opacity limit until a
  Method 9 reading is taken that shows the opacity is less than the opacity limit.
- 2.4.5 All opacity observations shall be performed by an observer with current and valid Method 9 certification. Results of Method 9 readings and a copy of the certified Method 9 reader's certificate shall be kept on site and made available to the Division upon request.
- 2.5 Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines", as follows:

The requirements below reflect the language in 40 CFR Part 63 Subpart ZZZZ as of the date of renewal permit issuance [July 1, 2012]. However, these engines are subject to the latest version of Subpart ZZZZ.

These requirements included in this Condition 2.5 are only federally enforceable. As of the date of renewal permit issuance [July 1, 2012], the requirements in 40 CFR Part 63 Subpart ZZZZ promulgated on March 3, 2010 have not been adopted into Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable. In the event that the Division adopts these requirements the emergency fire pump engine will be subject to the APEN reporting and minor source permitting requirements and these requirements will be state-enforceable.

Proposed revisions to the 40 CFR Part 63 Subpart ZZZZ were published in the Federal Register on June 7, 2012. The proposed revisions include changes to periods under which emergency engines may be operated (Condition 2.5.10). Therefore, these requirements may change in the future when the proposed rule is finalized.

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When do I have to comply with this subpart (§ 60.6595)

2.5.1 If you have an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. (§ 63.6595(a)(1))

What emission limitations must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions (§ 63.6602)

2.5.2 If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c of 40 CFR Part 63 Subpart ZZZZ which apply to you. Compliance with the numerical emission limitations established of 40 CFR Part 63 Subpart ZZZZ is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 of 40 CFR Part 63 Subpart ZZZZ. (§ 63.6602)

Note that this engine is not subject to emission limitations but is subject to work practice standards.

The requirements in Table 2c of 40 CFR Part 63 Subpart ZZZZ that apply to this engine, except during periods of startup are as follows:

- 2.5.2.1 Change oil and filter every 500 hours of operation or annually whichever comes first. (40 CFR Part 63 Subpart ZZZZ, Table 2c, item 1.a)
- 2.5.2.2 Inspect air cleaner every 1,000 hours of operation or annually whichever comes first. (40 CFR Part 63 Subpart ZZZZ, Table 2c, item 1.b)
- 2.5.2.3 Inspect all hoses and belts every 500 hours of operation or annually whichever comes first, and replace as necessary. (40 CFR Part 63 Subpart ZZZZ Table 2c, item 1.c)

The requirements in Table 2c of 40 CFR Part 63 Subpart ZZZZ that apply to this engine during periods of startup are as follows:

2.5.2.4 Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. (40 CFR Part 63 Subpart ZZZZ Table 2c, item 1)

Notwithstanding the above requirements, the following applies:

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- 2.5.2.5 If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Conditions 2.5.2.1 through 2.5.2.3, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. (40 CFR Part 63 Subpart ZZZZ, Table 2c, footnote 1)
- 2.5.2.6 Sources have the option to utilize an oil analysis program as described in Condition 2.5.8 in order to extend the specified oil change requirement in Condition 2.5.2.1. (40 CFR Part 63 Subpart ZZZZ, Table 2c, footnote 2)
- 2.5.2.7 Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. (40 CFR Part 63 Subpart ZZZZ, Table 2c, footnote 3)

What are my general requirements for complying with this subpart? (§ 63.6605)

- 2.5.3 You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times. (§ 63.6605(a))
- 2.5.4 At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (§ 63.6605(b))

What are my monitoring, installation, collection, operation, and maintenance requirements? (§ 63.6625)

2.5.5 If you own or operate an existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for

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- the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (§ 63.6625(e)(2))
- 2.5.6 If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed. (§ 63.6625(f))
- 2.5.7 If you operate a new or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d of 40 CFR Part 63 Subpart ZZZZ apply. (§ 63.6625(h))
- 2.5.8 If you own or operate a stationary engine that is subject to the work, operation or management practices in Condition 2.5.2.1, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 2.5.2.1. The oil analysis must be performed at the same frequency specified for changing the oil in Condition 2.5.2.1. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil before continuing to use the engine. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (§ 63.6625(i))

How do I demonstrate continuous compliance with the emission limitations and operating limitations? (§ 63.6640)

- 2.5.9 You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d [Conditions 2.5.2.1 through 2.5.2.3] to this subpart that apply to you according to methods specified in Table 6 to this subpart. (§ 63.6640(a)) The methods specified in Table 6 of Subpart ZZZZ are as follows:
  - 2.5.9.1 Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions (Subpart ZZZZ, Table 6, item 9.a.i); or
  - 2.5.9.2 Develop and follow your own maintenance plan which must provide to the

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extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (Subpart ZZZZ, Table 6, item 9.a.ii)

- 2.5.10 If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements Conditions 2.5.10.1 through 2.5.10.3. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Conditions 2.5.10.1 through 2.5.10.3, is prohibited. If you do not operate the engine according to the requirements in Conditions 2.5.10.1 through 2.5.10.3, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines. (§ 63.6640(f)(1))
  - 2.5.10.1 There is no time limit on the use of emergency stationary RICE in emergency situations. (§ 63.6640(f)(1)(i))
  - 2.5.10.2 You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine.

    Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. (§ 63.6640(f)(1)(ii))
  - 2.5.10.3 You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy

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deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph Condition 15.1.9.3, as long as the power provided by the financial arrangement is limited to emergency power. (§ 63.6640(f)(1)(iii))

What records must I keep? (§ 63.6655)

- 2.5.11 You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary emergency RICE. (§ 63.6655(e) and § 63.6655(e)(2))
- 2.5.12 If you own or operate an existing emergency stationary CI RICE with a site rating of less than or equal to 500 brake Hp located at major source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. (§ 63.6655(f) and § 63.6655(f)(1))
- 2.6 These engines are subject to the requirements in 40 CFR part 63 Subpart A "General Provisions", as adopted by reference in Colorado Regulation No. 8, Part E, Section I as specified in 40 CFR Part 63 Subpart ZZZZ § 63.6665. These requirements include, but are not limited to the following:
  - 2.6.1 Prohibited activities in § 63.4(a).
  - 2.6.2 Circumvention in § 63.4(b)

# 3. S004 –Rentech Natural Gas Fired Boiler Rated at 129 MMBtu/hr

Parameter	Permit Condition		tations	Compliance Emission Factor	Monito	•
	Number	Short Term	Long Term	Emission Factor	Method	Interval
BACT Requirements	3.1.	See Condition 3.1		N/A	See Condit	tion 3.1
PM	3.2.	0.164 lb	0.164 lbs/MMBtu		Fuel Restriction	Only Natural Gas is Used as Fuel
		N/A	2.28 tons/yr	0.0186 lb/MMBtu	Recordkeeping	Monthly
$PM_{10}$		N/A	2.28 tons/yr	0.0186 lb/MMBtu	and Calculation	
$NO_X$	3.3.	rolling	IBtu, on a 3-hr average	N/A	Continuous Emission	Continuously
		N/A	4.7 tons/yr		Monitoring System	
СО	3.4. 0.039 lb/MMBtu, based on t average of three (3) test run			N/A	See Condit	ion 3.4.
		N/A	4.75 tons/yr	0.039 lb/MMBtu	Recordkeeping and Calculation	Monthly
Natural Gas Consumption	3.5	N/A	231.9 MMscf/yr	Fuel Meter	Recordkeeping	Daily
NSPS General Provisions	3.6	N/A N/A		N/A	As required in the NSPS General Provisions	
NSPS Recordkeeping Requirement	3.7.		on of Annual ty Factor	N/A	Daily Recording of Fuel	12-Month Rolling Average
Continuous Emission Monitoring Requirements	3.8	N/A N/A		N/A	See Condit	tion 3.8
Opacity	3.9.		Not to Exceed 20%, Except as Provided for in 3.10		Fuel Restriction	Only Natural Gas is Used
Opacity	3.10.	For Certain Operational Activities - Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes		N/A		as Fuel
Opacity – <b>State-</b> <b>Only</b>	3.11.	Not to Ex	Not to Exceed 20%			

3.1 The auxiliary boiler is subject to the requirements of the prevention of Significant Deterioration (PSD) Program. Best Available Control Technology (BACT) shall be applied for control of Nitrogen Oxides (NO<sub>X</sub>), Carbon Monoxide (CO), Particulate Matter (PM and PM<sub>10</sub>) and Volatile Organic Compounds. BACT has been determined as follows:

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- 3.1.1 BACT for  $NO_X$  has been determined to be Low  $NO_X$  burners with the emission limit identified in Condition 3.3.1 (Colorado Construction Permit 02WE0228).
- 3.1.2 BACT for CO has been determined to be good combustion practices with the emission limit identified in Condition 3.4.1 (Colorado Construction Permit 02WE0228).
- 3.1.3 BACT for PM and  $PM_{10}$  has been determined to be use of pipeline quality natural gas as fuel.
- 3.1.4 BACT for VOC has been determined to be use of pipeline quality natural gas as fuel and good combustion practices.
- 3.2 Particulate Matter (PM and  $PM_{10}$ ) emissions from the boiler are subject to the following requirements:
  - 3.2.1 PM emissions shall not exceed 0.164 lb/MMBtu (Colorado Construction Permit 02WE0228 and Colorado Regulation No. 1, Section III.A.1.b). In the absence of credible evidence to the contrary, compliance with the particulate matter emission limits is presumed is natural gas is the only fuel permitted for use as fuel in the boiler.

Note that the numeric PM standard was determined using the design heat input for the boiler (129 MMBtu/hr) in the following equation:

 $PE = 0.5 \text{ x (FI)}^{-0.26}$ , where: PE = particulate standard in lbs/MMBtuFI = fuel input in MMBtu/hr

3.2.2 Emissions of PM and PM<sub>10</sub> shall not exceed the annual limitations listed above (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3 to add the annual PM and PM<sub>10</sub> emission limitations based on requested emissions on the APEN submitted March 21, 2007). Monthly emissions from the boiler shall be calculated by the end of the subsequent month using the above emission factors (from manufacturer), the monthly natural gas consumption and the heat content of the natural gas for the month as indicated in the DAHS in the following equation:

 $Tons/mo = \underbrace{EF\ (lb/MMBtu)\ x\ natural\ gas\ use\ (MMscf/mo)\ x\ heat\ content\ of\ gas\ (MMBtu/MMscf)}_{2000\ lbs/ton}$ 

Monthly emissions shall be used in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall calculated using the previous twelve months' data.

3.3 Nitrogen Oxide  $(NO_X)$  emissions from the boiler are subject to the following requirements:

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- 3.3.1 For purposes of BACT, NO<sub>X</sub> emissions from the boiler shall not exceed 0.038 lb/MMBtu, on a 3-hour rolling average (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3 to specify the averaging time). Compliance with the BACT NO<sub>X</sub> limit shall be monitored using the NO<sub>X</sub> CEMS required by Condition 3.9. For any hour in which fuel is combusted in the unit the permittee shall calculate the hourly average NO<sub>X</sub> concentration in units of lb/MMBtu in accordance with the requirements in 40 CFR Part 60 and Condition 6.4 of this permit. Hourly averages shall be used in a 3-hr rolling average to monitor compliance with the NO<sub>X</sub> BACT limit.
- 3.3.2 Annual emissions of NO<sub>X</sub> from the boiler shall not exceed the above limitations (Colorado Construction Permit 02WE0228). For any hour in which fuel is combusted in the boiler, the permittee shall program the DAHs to calculate lb/hr NO<sub>X</sub> emissions in accordance with the requirements in Condition 6.1.1.4.b of this permit and 40 CFR Part 60. Specifically hourly mass NO<sub>X</sub> emissions (in lb/hr) shall be calculated by multiplying the hourly NO<sub>X</sub> lb/MMBtu value by the hourly heat input value (MMBtu/hr). The hourly NO<sub>X</sub> lb/MMBtu and heat input values shall be determined using the appropriate equations in Method 19 of 40 CFR Part 60. Hourly emissions shall be summed to determine monthly emissions (in tons). Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months' data.
- 3.4 Carbon Monoxide (CO) emissions from the boiler are subject to the following requirements:
  - 3.4.1 For purposes of BACT, CO emissions from the boiler shall not exceed 0.039 lb/MMBtu, based on the average of three (3) test runs (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3 to specify the averaging time). Compliance with the CO BACT limit shall be monitored as follows:
    - 3.4.1.1 Compliance with the CO BACT emission limitation shall be presumed, in the absence of credible evidence to the contrary, provided the boiler is operated in accordance with manufacturer's recommendations and good engineering practices.
    - 3.4.1.2 A performance test shall be conducted within sixty (60) boiler operating days of re-starting the boiler. A boiler operating day is defined as any calendar day in which fuel is combusted in the boiler for any period of time. Thereafter, a performance test shall be conducted whenever hours of operation for the boiler reaches 1,200 hours in any two consecutive years. This test shall be conducted within 60 days of reaching 1,200 hours. Performance tests shall be conducted using the appropriate EPA methods.

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A stack testing protocol shall be submitted for Division approval at least thirty (30) calendar days prior to performance of the test required under this condition. No stack test required herein shall be performed without prior written approval of the protocol by the Division. The Division reserves the right to witness the test. In order to facilitate the Division's ability to make plans to witness the test, notice of the date (s) for the stack test shall be submitted to the Division at least thirty (30) calendar days prior to the test. The Division may for good cause shown, waive this thirty (30) day notice requirement. In instances when a scheduling conflict is presented, the Division shall immediately contact the permittee in order to explore the possibility of making modifications to the stack test schedule. The required number of copies of the compliance test results shall be submitted to the Division within forty-five (45) calendar days of the completion of the test unless a longer period is approved by the Division.

3.4.2 Annual emissions CO from the boiler shall not exceed the limitation stated above (Colorado Construction Permit 02WE0228, as modified under the provision of Section I, Condition 1.3 to increase CO emissions to level requested on the APEN received March 21, 2007). Monthly emissions from the boiler shall be calculated by the end of the subsequent month using the emission factor above (from the manufacturer), the monthly natural gas consumption and the heat content of the natural gas for the month as indicated in the DAHS in the following equation:

 $Tons/mo = \underbrace{EF\ (lb/MMBtu)\ x\ natural\ gas\ use\ (MMscf/mo)\ x\ heat\ content\ of\ gas\ (MMBtu/MMscf)}_{2000\ lbs/ton}$ 

Monthly emissions shall be used in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months' data.

- 3.5 Natural gas consumption from the boiler shall not exceed the limitation stated above (Construction Permit 02WE0228). Natural gas consumed in the boiler shall be recorded daily, as required by 40 CFR Part 60 Subpart Db § 60.49(d), as adopted by reference in Colorado Regulation No. 6, Part A. Daily quantities of natural gas consumed shall be summed to determine the monthly natural gas consumption. Monthly quantities of natural gas consumption for the boiler shall be used in a twelve month rolling total to monitor compliance with the annual limitation. Each month a new twelve month total shall be calculated using the previous twelve months data.
- 3.6 Regulation No. 6, Part A, Subpart A, General Provisions applies as follows:
  - 3.6.1 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with

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an opacity standard or with a standard which is based on the concentration of a pollutant in the gasses discharged to the atmosphere (§ 60.12)

- 3.6.2 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source (Colorado Construction Permit 91MR933, initial approval, modification 4, dated October 26, 1999 and 40 CFR Subpart A § 60.11(d)).
- 3.7 The owner of operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual, oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month (40 CFR Part 60 Subpart Db § 60.49b(d), as adopted by reference in Colorado Regulation No. 6, Part A).
- 3.8 The owner or operator of an affected facility subject to a NO<sub>X</sub> standard under 40 CFR Part 60 Subpart Db § 60.44b shall install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) for measuring NO<sub>X</sub> and O<sub>2</sub> (or CO<sub>2</sub>), and shall record the output of the system (40 CFR Part 60 Subpart Db § 60.48b(b)(1), as adopted by reference in Colorado Regulation No. 6, Part A). The NO<sub>X</sub> CEMS shall meet the requirements in Condition 6 of this permit. In addition, to recording the NO<sub>X</sub> concentration (lb/MMBtu), as required by Condition 6.4.2, the CEMS shall also record the NO<sub>X</sub> mass emission rate in lbs/hr and tons/month. Monthly NO<sub>X</sub> emissions from the CEMS shall be used as specified by Condition 3.3.2 to monitor compliance with the annual NO<sub>X</sub> emission limitation.
- 3.9 Except as provided for in Condition 3.10 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity (Colorado Construction Permit 02WE0228 and Colorado Regulation No.1, Section II.A.1). In the absence of credible evidence to the contrary, compliance with the opacity standard shall be presumed since only natural gas is permitted to be used as fuel for this boiler.
- 3.10 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, process modifications, or adjustment or occasional cleaning of control equipment which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4). In the absence of credible evidence to the contrary, compliance with the opacity standard shall be presumed since only natural gas is permitted to be used as fuel for this boiler.

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3.11 **State-Only Requirement:** No owner or operator may discharge, or cause the discharge into the atmosphere of any particulate matter which is greater than 20% opacity (Colorado Regulation No. 6, Part B, Section II.C.3). In the absence of credible evidence to the contrary, compliance with the opacity standard shall be presumed since only natural gas is permitted to be used as fuel for this boiler.

Note that this opacity standard applies at all times except during periods of startup, shutdown and malfunction (40 CFR Part 60 Subpart A § 60.11(c), as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A).

Note that this opacity requirement is more stringent than the opacity requirement in Condition 3.10 during periods of building of a new fire, cleaning of fire boxes, soot blowing, process modifications and adjustment or occasional cleaning of control equipment.

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# 4. S006 – Marley Cooling Water Tower

Parameter	Permit	Limitations		Compliance	Monitoring	
	Condition Number	Short Term	Long Term	Emission Factor	Method	Interval
BACT Requirements	4.1.	N/A	N/A	N/A	See Condit	ion 4.1.
PM	4.2.	N/A	19.3 tons/yr	See Condition 4.2	Recordkeeping and Calculation	Monthly
$PM_{10}$	1	N/A	19.3 tons/yr	1		
Water Circulated	4.2	N/A	92,505.6 mmgal/yr	N/A	Recordkeeping	Monthly
Total Solids Concentration	4.3	N/A	N/A	N/A	Laboratory Analysis	Quarterly
Opacity	4.4	Not to Exceed 20%		N/A	See Condition 4.4.	

- 4.1 The cooling water tower is subject to the requirements of the prevention of Significant Deterioration (PSD) Program. Best Available Control Technology (BACT) shall be applied for control of Particulate Matter (PM and PM<sub>10</sub>). BACT has been determined to be the use of drift eliminators to achieve drift levels of 0.0005% (Colorado Construction Permit 02WE0228).
- 4.2 Particulate Matter (PM and PM<sub>10</sub>) emissions shall not exceed the limitations above (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3, to include the requested PM and PM<sub>10</sub> emissions indicated on the APEN submitted on March 21, 2007). Emissions shall be calculated monthly using the following equations:

 $PM = PM_{10} \; (tons/month) = \underline{Q \; x \; d \; x \; \% \; drift \; x \; x \; total \; solids \; concentration} \\ 2000 \; lbs/ton$ 

Where: Q = water circulated, gal/month

d = density of water, lbs/gal (from T5 application d = 8.34 lbs/gal)

% drift = 0.0005% (BACT limitation)

Total solids = in ppm (lbs solids/ $10^6$  lbs water) - to be determined by Condition 4.3. The most

recent analysis shall be used in the monthly calculation.

Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual limitation. Each month a new twelve month total shall be calculated using the previous twelve months data.

4.3 The Water Circulated through the cooling water tower shall not exceed the limitation above (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3, to include the requested water circulation limit indicated on the APEN submitted on March 21, 2007). The quantity of water circulated shall be determined each month by multiplying the hours of operation of each pump (two pumps, each pump 88,000 gal/min) by the design flow rate of each pump as follows:

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Water Circulation Rate = hours of operation (hrs/mo) x Design Flow Rate (Gal/min) x 60 min/hr

Monthly quantities of water shall be used in a twelve month rolling total to monitor compliance with the annual limitation. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 4.4 Samples of water circulated through the tower shall be taken and analyzed quarterly. Calculations of monthly emissions shall be made using the total solids concentration determined from the most recent required analysis. A copy of the procedures used to obtain and to analyze samples shall be maintained and made available to the Division upon request.
- 4.5 Opacity of emissions from the cooling water tower shall not exceed 20% (Colorado Regulation No. 1, Section II.A.1). In the absence of credible evidence to the contrary, compliance with the opacity standard shall be presumed, provided the drift eliminators on the tower are operated and maintained in accordance with the manufacturers= recommendations and good engineering practices.

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# 5. Facility Wide HAP Limits

Parameter	Permit Condition Number	Limitations Short Term Long Term		Compliance Emission Factor	Monitoring Method Interval	
Facility Wide Formaldehyde Emissions	5.1	N/A	2.44 tons/yr	See Condition 5.1	Recordkeeping and Calculation	Monthly
Facility Wide Total HAPs		N/A	13.1 tons/yr	See Condition 5.1		

5.1 Emissions of HAPs shall not exceed the limitations stated above (Colorado Construction Permit 02WE0228, as modified under the provisions of Section I, Condition 1.3 to reflect requested emissions on the APENS submitted on March 21, 2007). Emissions shall be calculated by the end of the subsequent month using actual throughputs and the following compliance emission factors.

Emission Unit	Pollutant	Emission Factor	Emission Factor Source
Turbines/HRSG/Duct Burners	Formaldehyde	Unit 1 – 1.5 x 10 <sup>-4</sup> lb/MMBtu Unit 2 – 1.3 x 10 <sup>-4</sup> lb/MMBtu	From performance tests conducted May 8, 11, 12, 20 and September 16, 2004.
	Acetaldehyde	1.37 x 10 <sup>-1</sup> lb/MMscf	From California Air
	Acrolein	1.89 x 10 <sup>-2</sup> lb/MMscf	Toxics Emission Factor
	Benzene	1.33 x 10 <sup>-2</sup> lb/MMscf	(databases) for natural gas-fired turbines with
	Ethylbenzene	1.79 x 10 <sup>-2</sup> lb/MMscf	COC and SCR.
	Hexane	2.59 x 10 <sup>-1</sup> lb/MMscf	
	Propylene Oxide	4.78 x 10 <sup>-2</sup> lb/MMscf	
	Toluene	7.10 x 10 <sup>-2</sup> lb/MMscf	
	Xylene	2.61 x 10 <sup>-2</sup> lb/MMscf	
Cooling Water Tower	Chloroform	2.3 kg/10 <sup>9</sup> liters	from "Locating and Estimating Air Emissions from Sources of Chloroform", EPA-450/4- 84-007c, March 1984, for re-circulating units.

A twelve-month rolling total shall be maintained for demonstration of compliance with annual limitations. Each month, a new twelve month total shall be calculated using the previous twelve months data. Records of calculations shall be maintained for Division inspection upon request.

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# **6.** Continuous Emission Monitoring Requirements

Note that the continuous emission monitoring requirements identified in this Condition **for each turbine/HRSG/duct burner**, are in addition to the continuous emission monitoring requirements required by the Acid Rain Program, which are identified in Section III of this permit.

- 6.1 Equipment and QA/QC Requirements
  - 6.1.1 The Continuous Emission Monitoring Systems (CEMS) are subject to the following requirements:
    - 6.1.1.1 The NO<sub>X</sub> (and diluent) monitors for the auxiliary boiler is subject to the applicable requirements of 40 CFR Part 60. The monitoring systems shall meet the equipment, installation and performance specifications of 40 CFR Part 60 Appendix B, Performance Specifications 2 and 3. These CEMS are subject to the quality assurance/quality control requirements in 40 CFR Part 60 Appendix F and Subpart A § 60.13 and Condition 6.1.1.4 of this permit.
    - 6.1.1.2 Except as provided for below, the **CO monitors for the turbines/HRSGS/duct burners are** subject to the applicable requirements of 40 CFR Part 60 (Colorado Construction Permit 02WE0228). The monitoring systems shall meet the equipment, installation and performance specifications of 40 CFR Part 60 Appendix B, Performance Specification 4/4A. These CEMS are subject to the quality assurance/quality control requirements in 40 CFR Part 60 Appendix F and Subpart A § 60.13 and Condition 6.1.1.4 of this permit.
      - a. The CO CEMS data shall meet the applicable "primary equipment hourly operating requirements" for hourly average calculation methodology specified in 40 CFR Part 75 Subpart B § 75.10(d).
      - b. Annual CO monitor relative accuracy (RA) testing will be performed in ppm @ 15 % O<sub>2</sub> measurement units, and will be performed according to 40 CFR Part 60, Appendix B, Performance Specification 4A.
      - c. Relative accuracy test audit (RATA) frequency will be determined according to 40 CFR Part 60 Appendix F.
    - 6.1.1.3 The NO<sub>X</sub> (and diluent) monitors for the turbines/HRSGs/duct burners are subject to the applicable requirements of 40 CFR Part 75 (Colorado Construction Permit 02WE0228). The monitoring systems shall meet the equipment, installation and performance specification requirements in 40 CFR Part 75, Appendix A. These CEMS shall meet the quality assurance/quality control requirements in 40 CFR Part 75, Appendix B

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and the conversion procedures of Appendix F and Condition 6.1.1.4 of this permit.

- 6.1.1.4 The NO<sub>X</sub> and CO CEMS for the turbines/HRSGs/duct burners and the NO<sub>X</sub> CEMS for the auxiliary boiler are subject to the following requirements:
  - a. Relative Accuracy Test Audits (RATAs): RATAs shall be conducted in the units (e.g., lb/MMBtu, ppm) of the emission limitation for all of the emission limitations that are applicable to the emissions unit. The RATAs for emissions units that have annual emission limitations (tons/yr) will be conducted in terms of pounds per hour (lb/hr).
  - b. The DAHS shall be able to record and manipulate the data in the units (e.g., lb/MMBtu, ppm) of the emission limitation and meet the reporting requriements for all for the emissions limitations that are applicable to the emissions unit.
- 6.1.2 Quality assurance/quality control plans shall be prepared for the continuous emission monitoring systems as follows:
  - 6.1.2.1 The quality assurance/quality control plan for the  $NO_X$  (and diluent) monitors for the auxiliary boiler shall be prepared in accordance with the applicable requirements in 40 CFR Part 60, Appendix F.
  - 6.1.2.2 The quality assurance/quality control plan for the **CO monitors for the turbines/HRSG/duct burners** shall be prepared in accordance with the applicable requirements in 40 CFR Part 75, Appendix B.
  - 6.1.2.3 The quality assurance /quality control plan for the  $NO_X$  (and diluent) monitors for the turbines/HRSG/duct burners shall be prepared in accordance with the applicable requirements in 40 CFR Part 75, Appendix B.

The quality assurance/quality control plans shall be made available to the Division upon request. Revisions shall be made to the plans at the request of the Division.

# 6.2 General Provisions

6.2.1 CO monitors for turbines/HRSGs/duct burners and NO<sub>X</sub> (and diluent) monitors for auxiliary boiler: The permittee shall ensure that all continuous emission monitoring systems required are in operation and monitoring unit emissions at all times except for monitoring system breakdowns, repairs, calibration checks and zero and span adjustments required under 40 CFR Part 60 Subpart A § 60.13(d) (40 CFR Part 60 Subpart A § 60.13(e)).

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- NO<sub>X</sub> (and diluent) monitors for turbines/HRSGs/duct burners: The permittee shall ensure that all continuous emission monitoring systems required are in operation and monitoring unit emissions at all times that the affected unit combusts any fuel except as provided in 40 CFR § 75.11(e) and during periods of calibration, quality assurance, or preventative maintenance performed pursuant to 40 CFR Part 75, § 75.21 and Appendix B, periods of repair, periods of backups of data from the data acquisition and handling system or recertification performed pursuant to 40 CFR § 75.20 (40 CFR Part 75 § 75.10(d)).
- Alternative monitoring systems, alternative reference methods, or any other alternatives for the required continuous emission monitoring systems shall not be used without having obtained prior written approval from the appropriate agency, either the Division or the U. S. EPA, depending on which agency is authorized to approve such alternative under applicable law. Any alternative continuous emission monitoring systems or continuous opacity monitoring systems must be certified in accordance with the applicable requirements of 40 CFR Part 60 or 40 CFR Part 75 prior to use.
- All test and monitoring equipment, methods, procedures and reporting shall be subject to the review and approval by the appropriate agency, either the Division or the U. S. EPA, depending on which agency is authorized to approve such item under applicable law, prior to any official use. The Division shall have the right to inspect such equipment, methods and procedures and data obtained at any time. The Division may provide a witness(s) for any and all tests as Division resources permit.
- 6.2.5 A file suitable for inspection shall be maintained of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by applicable portions of 40 CFR Part 60 Subpart A and Appendices B and F and 40 CFR Part 75.
- Records shall be maintained of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the source; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative (40 CFR Part 60 Subpart A § 60.7(b) and Colorado Construction Permit 02WE0228).
- 6.3 Data Replacement Requirements for each Turbine/HRSG/Duct Burner CEMS

For periods when quality assured data is not available from the continuous emission monitoring systems the data replacement procedures in 40 CFR Part 75 Subpart D shall be used for determining the total (annual) emissions. Although CO emissions are not specifically referenced

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in the Subpart D procedures, the CEMS data acquisition system is programmed to substitute CO emissions using the same procedures specified for NO<sub>X</sub>. For purposes of monitoring compliance with the annual emission limitations (tons/yr) replaced and bias-adjusted data shall be included when assessing compliance with the annual limitations. Note that since CO emissions are not subject to requirements in 40 CFR Part 75 the CO emission data is not required to be bias-adjusted.

# 6.4 NSPS Subpart Db Provisions for the Auxiliary Boiler NO<sub>X</sub> CEMS

- 6.4.1 The continuous emission monitoring system required by Section II, Condition 3.9 of this permit shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments (40 CFR Part 60 Subpart Db § 60.48b(c)).
- The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by Section II, Condition 3.8 of the permit and required under § 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates. The 1-hour averages shall be calculated using the data points required under § 60.13(h)(3) (40 CFR Part 60 Subpart Db § 60.48b(d)).
- 6.4.3 The procedures under § 60.13 shall be followed for installation, evaluation and operation of the continuous monitoring systems (40 CFR Part 60 Subpart Db § 60.48b(e)). The span value for nitrogen oxides is 100 ppm.

# 6.5 Recordkeeping and Reporting Requirements

- 6.5.1 The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, by the end of the calendar month following the end of each semi-annual period (i.e., January June, July December), a report of excess emissions for all pollutants monitored for that quarter (40 CFR Part 60 Subpart A § 60.7(c)). Reports shall consist of the following information for all pollutants monitored for the semi-annual period and all applicable limits:
  - 6.5.1.1 The magnitude of excess emissions computed in accordance with 40 CFR Part 60 Subpart A § 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions and the process operating time during the reporting period (40 CFR Part 60 Subpart A § 60.7(c)(1)).
  - 6.5.1.2 Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action

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- taken or preventative measures adopted (40 CFR Part 60 Subpart A § 60.7(c)(2)).
- 6.5.1.3 The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments (40 CFR Part 60 Subpart A § 60.7(c)(3)).
- When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR Part 60 Subpart A § 60.7(c)(4)).
- 6.5.2 The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, by the end of the calendar month following the end of each semi-annual period (i.e., January June, July December), a summary report for that semi-annual period (40 CFR Part 60 Subpart A § 60.7(c)). One summary report form shall be submitted for each pollutant monitored and all applicable limits. This report shall contain the information and be presented in a format approved by the Division.

If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and continuous monitoring system (CMS) downtime is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Condition 6.5.1 need not be submitted unless required by the Division (40 CFR Part 60 Subpart A § 60.7(d)(1)).

If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Condition 6.5.1 shall both be submitted (40 CFR Part 60 Subpart A § 60.7(d)(1)).

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# 7. M001 - Gasoline Storage Tank, 500 gallons aboveground

Parameter			Compliance	Monitoring		
	Condition Number	Short Term	Long Term	Emission Factor	Method	Interval
Gasoline Throughput	7.1	N/A	N/A	N/A	Recordkeeping	Monthly
40 CFR Pat 63 Subpart CCCCCC Requirements	7.2.	Work Practice Standards		N/A	See Condition 7.2	

Note that this emission units is exempt from the APEN reporting requirements in Regulation No. 3, Part A and the construction permit requirements in Regulation No. 3, Part B.

- 7.1 The quantity of gasoline processed through this tank shall be monitored and recorded monthly. Monthly records of gasoline processed shall be retained as required by Condition 7.2.1.
- 7.2 This tank is subject to the requirements in 40 CFR Part 63 Subpart CCCCCC, "National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities", as follows:

The requirements below reflect the language in 40 CFR Part 63 Subpart CCCCCC as of the date of renewal permit issuance [July 1, 2012]. However, this tank is subject to the latest version of Subpart CCCCCC.

These requirements included in this Condition 7.2 are only federally enforceable. As of the date of renewal permit issuance [July 1, 2012], the requirements in 40 CFR Part 63 Subpart CCCCCC have not been adopted into Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable. In the event that the Division adopts these requirements this tank will be subject to the APEN reporting and minor source permitting requirements and these requirements will be state-enforceable.

- 7.2.1 If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in §63.11116 (Conditions 7.2.7 through 7.2.10). (§ 63.1111(b))
- 7.2.2 The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to §63.11116 of this subpart (Conditions 7.2.7 through 7.2.10). (§ 63.1111(b))
- 7.2.3 An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold

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level, as applicable. For new or reconstructed affected sources, as specified in §63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in §63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years. (§ 63.11111(e)).

- 7.2.4 If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011. (§ 63.11113(b))
- 7.2.5 You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (§ 63.11115(a))
- 7.2.6 You must keep applicable records and submit reports as specified in §63.11125(d) and §63.11126(b). (§ 63.11115(b)) Records and reports noted in this permit condition are related to malfunctions. Note that since this source is not subject to any emission limitation and is specifically exempt from reporting requirements as specified in Condition 7.2.8, the reporting requirements in §63.11125(d) do not apply to this source.
- 7.2.7 You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following § 63.11116(a)):
  - 7.2.7.1 Minimize gasoline spills;
  - 7.2.7.2 Clean up spills as expeditiously as practicable;
  - 7.2.7.3 Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
  - 7.2.7.4 Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators;
- 7.2.8 You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24

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hours of a request by the Administrator to document your gasoline throughput. (40 CFR Part 63 Subpart CCCCCC § 63.11116(b))

- 7.2.9 You must comply with the requirements of this subpart by the applicable date specified in Condition 7.2.4 (40 CFR Part 63 Subpart CCCCCC § 63.11116(c)).
- 7.2.10 Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with Condition 7.2.7.3. (§ 63.11116(d))

### 8. M002 – Cold Cleaner Solvent Vat

Parameter Permit Condition		Lin	nitations	Compliance Emission Monitoring Factor		oring
	Number	Short Term	Long Term		Method	Interval
Work Practice Standards	8.1	N/A	N/A	N/A	Internal Audit	Annually
Transfer and Storage of Waste/Used Solvents	8.2	N/A	N/A	N/A	Certification	Annually

Note that this emission unit is exempt from the APEN reporting requirements in Regulation No. 3, Part A and the construction permit requirements in Regulation No. 3, Part B.

- 8.1 Operation of the cold cleaner solvent vat shall meet the standards defined in Colorado Regulation 7, Section X.B. Compliance shall be monitored by following the work practices defined in Public Service Company's Policy Manual regarding operation, maintenance and design of the cold cleaner solvent vats. The Policy Manual shall include, at a minimum the requirements defined in Colorado Regulation 7, Section X.B and shall be available to the inspector upon request. Audits of the vat operations and/or the policy manual shall be performed annually to ensure that operations are performed within the requirements of the policy manual and that the policy manual incorporates the requirements of Regulation 7, Section X.B. Audit reports are to be maintained and made available to the Division upon request.
- 8.2 The transfer and storage of waste and used solvents from the cold cleaner solvent vats are subject to the following requirements (Colorado Regulation No. 7, Section X.A.3 and 4):
  - 8.2.1 In any disposal or transfer of waste or used solvent, at least 80 percent by weight of the solvent/waste liquid shall be retained (i.e., no more than 20 percent of the liquid solvent/solute mixture shall evaporate or otherwise be lost during transfers).
  - Waste or used solvents shall be stored in closed containers unless otherwise required by law.

# **SECTION III - Acid Rain Requirements**

## 1. Designated Representative and Alternate Designated Representative

Designated Representative: Alternate Designated Representative:

Name: George Hess Name: Gary Magno

Title: General Manager, Power Title: Manager Environmental Services -

Generation, CO Air Quality Compliance

Phone: (303) 751-7282 Phone: (303) 294-2177

## 2. Sulfur Dioxide Emission Allowances and Nitrogen Oxide Emission Limitations

Combustion Turbine No. CT-01	2012	2013	2014	2015	2016	2017
SO <sub>2</sub> Allowances, per 40 CFR Part 73.10(b), Table 2	0*	0*	0*	0*	0*	0*
NO <sub>X</sub> Limits		This U	Jnit Has No NO <sub>X</sub>	Limits (See Sect	tion 5)	

<sup>\*</sup> Under the provisions of § 72.84(a) any allowance allocations to, transfers to and deductions from an affected unit's Allowance Tracking System account is considered an automatic permit amendment and as such no revision to the permit is necessary. Numerical allowances shown in this table are from the 1996 edition of the CFR.

Combustion Turbine No. CT-02	2012	2013	2014	2015	2016	2017
SO <sub>2</sub> Allowances, per 40 CFR Part 73.10(b), Table 2	0*	0*	0*	0*	0*	0*
NO <sub>X</sub> Limits	This Unit Has No NO <sub>X</sub> Limits (See Section 5)					

<sup>\*</sup> Under the provisions of § 72.84(a) any allowance allocations to, transfers to and deductions from an affected unit's Allowance Tracking System account is considered an automatic permit amendment and as such no revision to the permit is necessary. Numerical allowances shown in this table are from the 1996 edition of the CFR.

## 3. Standard Requirements

Combustion Turbines CT-01 and CT-02 of this facility are subject to and the source has certified that they will comply with the following standard conditions (per Acid Rain Permit application, revised 12/2009).

## Permit Requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
  - i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

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- ii) Submit in a timely manner any supplemental information that the Division determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
  - i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the Division; and
  - ii) Have an Acid Rain Permit.

# Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Federal Clean Air Act and other provisions of the operating permit for the source.

# Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each affected unit at the source shall:
  - i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Federal Clean Air Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

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- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

<u>Nitrogen Oxides Requirements</u>. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

# Excess Emissions Requirements.

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan to the Administrator of the U. S. EPA, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
  - i) Pay without demand, to the Administrator of the U. S. EPA, the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

## Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or the Division:
  - i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

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- Copies of all reports, compliance certifications, and other submissions and all records made or iii) required under the Acid Rain Program; and,
- iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- The designated representative of an affected source and each affected unit at the source shall submit the (2) reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

# Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Federal Clean Air Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Federal Clean Air Act and 18 U.S.C. 1001.
- No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs (3) prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- Any provision of the Acid Rain Program that applies to an affected source (including a provision (5) applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Federal Clean Air Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Federal Clean Air Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Federal Clean Air Act, including the

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provisions of title I of the Federal Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Federal Clean Air Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

# 4. Reporting Requirements

Pursuant to 40 CFR Part 75.64 quarterly reports and compliance certification requirements shall be submitted to the Administrator within 30 days after the end of the calendar quarter. The contents of these reports shall meet the requirements of 40 CFR 75.64.

Revisions to this permit shall be made in accordance with 40 CFR Part 72, Subpart H, §§ 72.80 through 72.85 (as adopted by reference in Colorado Regulation 18). Permit modification requests shall be submitted to the Division at the address identified in Appendix D.

Changes to the Designated Representative or Alternate Designated Representative shall be made in accordance with 40 CFR 72.23.

# 5. Comments, Notes and Justifications

Combustion Turbines CT-01 and CT-02 burn natural gas as fuel. The NO<sub>X</sub> limitations in 40 CFR Part 76 are only applicable to coal-fired utility units and thus do not apply to CT-01 and CT-02.

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# **SECTION IV - Permit Shield**

Regulation No. 3, 5 CCR 1001-5, Part C, §§ I.A.4, V.D., & XIII.B and § 25-7-114.4(3)(a), C.R.S.

# 1. Specific Non-Applicable Requirements

Based on the information available to the Division and supplied by the applicant, the following parameters and requirements have been specifically identified as non-applicable to the facility to which this permit has been issued. This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance. In addition, this shield does not protect the source from any violations that occur as a result of any modifications or reconstruction on which construction commenced prior to permit issuance.

The source did not specifically identify and justify any non-applicable requirements to be included in the permit shield.

# 2. General Conditions

Compliance with this Operating Permit shall be deemed compliance with all applicable requirements specifically identified in the permit and other requirements specifically identified in the permit as not applicable to the source. This permit shield shall not alter or affect the following:

- 2.1 The provisions of §§ 25-7-112 and 25-7-113, C.R.S., or § 303 of the federal act, concerning enforcement in cases of emergency;
- 2.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 2.3 The applicable requirements of the federal Acid Rain Program, consistent with § 408(a) of the federal act;
- 2.4 The ability of the Air Pollution Control Division to obtain information from a source pursuant to § 25-7-111(2)(I), C.R.S., or the ability of the Administrator to obtain information pursuant to § 114 of the federal act;
- 2.5 The ability of the Air Pollution Control Division to reopen the Operating Permit for cause pursuant to Regulation No. 3, Part C, § XIII.
- 2.6 Sources are not shielded from terms and conditions that become applicable to the source subsequent to permit issuance.

# 3. Streamlined Conditions

The following applicable requirements have been subsumed within this operating permit using the pertinent streamlining procedures approved by the U.S. EPA. For purposes of the permit shield, compliance with the

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listed permit conditions will also serve as a compliance demonstration for purposes of the associated subsumed requirements.

Permit Condition	Streamlined (Subsumed) Requirements
	Turbines/HRSGs/Duct Burners
Section II, Condition 1.2.2.	Regulation No. 1, Section II.A.1.c [PM emissions shall not exceed 0.1 lb/MMBtu, based on the average of three (3) 1-hr tests]
Section II, Condition 1.2.2	40 CFR Part 60 Subpart Da § 60.42a(a)(1), as adopted by reference in Colorado Regulation No. 6, Part A [PM emissions shall not exceed 0.03 lb/MMBtu, based on the average of three (3) 2-hr tests]]
Section II, Condition 1.5.1.1.	40 CFR Part 60 Subpart Da § 60.44a(d)(1), as adopted by reference in Colorado Regulation No. 6, Part A [NO <sub>X</sub> emissions shall not exceed 1.6 lbs/MW-hr]
Section II, Condition 1.5.1.1	40 CFR Part 60, Subpart GG § 60.332(b), as adopted by reference in Colorado Regulation NO. 6, Part A [NO <sub>X</sub> emissions shall not exceed 102 ppmvd at 15% O <sub>2</sub> and ISO standard ambient conditions]
Section II, Condition 1.10	40 CFR Part 60 Subpart GG §§ 60.334(h)(3), as adopted by reference in Colorado Regulation No. 6, Part A [monitor sulfur content of fuel]
Section II, Condition 1.4.3	Regulation No. 6, Part B, Section II.D.3.b [SO <sub>2</sub> emissions not to exceed 0.35 lbs/MMBtu] - <b>State-only Requirement</b>
Section II, Condition 1.11	Regulation No. 6, Part B, Section I [general provisions] - State-only Requirement
	Auxiliary Boiler
Section II, Condition 3.3.1	40 CFR Part 60 Subpart Db § 60.44b(a)(1), (h) and (i) [NO <sub>X</sub> emissions not to exceed 0.20 lb/MMBtu, limit applies at all times, including s/s/m and limit is on a 30-day rolling average].
Section II, Condition 6.5.1	40 CFR Part 60 Subpart Db § 60.48b(e)(2) [NO <sub>X</sub> CEMS span value shall be 500 ppm].
Section II, Condition 6.4.3	40 CFR Part 60 Subpart Db §§ 60.49b(g), (h), (i), (v) and (w) [NO <sub>X</sub> records, excess emission reports, CEMS reports, option to submit electronic reports and frequency for submitting reports].
Section V, Conditions 22.b & c	40 CFR Part 60 Subpart Db § 60.49b(o) [retain records for 2 yrs]
Section II, Condition 3.7	Regulation No. 6, Part B, Section I [general provisions] - State-only Requirement
Section II, Condition 3.2.1	Regulation No. 6, Part B, Section II.C.2 [particulate matter standard] - State-only Requirement

## **SECTION V - General Permit Conditions**

5/22/12 version

#### 1. Administrative Changes

#### Regulation No. 3, 5 CCR 1001-5, Part A, § III.

The permittee shall submit an application for an administrative permit amendment to the Division for those permit changes that are described in Regulation No. 3, Part A, § I.B.1. The permittee may immediately make the change upon submission of the application to the Division.

# 2. Certification Requirements

## Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.9., V.C.16.a.& e. and V.C.17.

- a. Any application, report, document and compliance certification submitted to the Air Pollution Control Division pursuant to Regulation No. 3 or the Operating Permit shall contain a certification by a responsible official of the truth, accuracy and completeness of such form, report or certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- b. All compliance certifications for terms and conditions in the Operating Permit shall be submitted to the Air Pollution Control Division at least annually unless a more frequent period is specified in the applicable requirement or by the Division in the Operating Permit.
- c. Compliance certifications shall contain:
  - (i) the identification of each permit term and condition that is the basis of the certification;
  - (ii) the compliance status of the source;
  - (iii) whether compliance was continuous or intermittent;
  - (iv) method(s) used for determining the compliance status of the source, currently and over the reporting period; and
  - (v) such other facts as the Air Pollution Control Division may require to determine the compliance status of the source.
- d. All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.
- e. If the permittee is required to develop and register a risk management plan pursuant to § 112(r) of the federal act, the permittee shall certify its compliance with that requirement; the Operating Permit shall not incorporate the contents of the risk management plan as a permit term or condition.

## 3. Common Provisions

# Common Provisions Regulation, 5 CCR 1001-2 §§ II.A., II.B., II.C., II,E., II.F., II.I, and II.J

a. To Control Emissions Leaving Colorado

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When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving State to be exceeded, provided reciprocal action is taken by the receiving State.

b. Emission Monitoring Requirements

The Division may require owners or operators of stationary air pollution sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

c. Performance Testing

The owner or operator of any air pollution source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations.

Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

- (i) specifies or approves, in specific cases, the use of a test method with minor changes in methodology;
- (ii) approves the use of an equivalent method;
- (iii) approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance; or
- (iv) waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard. Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under the Colorado Revised Statutes, Title 25, Article 7, and pursuant to regulations promulgated by the Commission.

Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Division thirty days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the thirty day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- (i) Sampling ports adequate for test methods applicable to such facility;
- (ii) Safe sampling platform(s);
- (iii) Safe access to sampling platform(s); and
- (iv) Utilities for sampling and testing equipment.

Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining

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compliance with an applicable standard, the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

Nothing in this section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

d. Affirmative Defense Provision for Excess Emissions during Malfunctions

An affirmative defense to a claim of violation under these regulations is provided to owners and operators for civil penalty actions for excess emissions during periods of malfunction. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of evidence that:

- (i) The excess emissions were caused by a sudden, unavoidable breakdown of equipment, or a sudden, unavoidable failure of a process to operate in the normal or usual manner, beyond the reasonable control of the owner or operator;
- (ii) The excess emissions did not stem from any activity or event that could have reasonably been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;
- (iii) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded:
- (iv) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;
- (v) All reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air quality;
- (vi) All emissions monitoring systems were kept in operation (if at all possible);
- (vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence;
- (viii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance:
- (ix) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This section is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement; and
- (x) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in the Commissions' Regulations that could be attributed to the emitting source.

The owner or operator of the facility experiencing excess emissions during a malfunction shall notify the division verbally as soon as possible, but no later than noon of the Division's next working day, and shall submit written notification following the initial occurrence of the excess emissions by the end of the source's next reporting period. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

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The Affirmative Defense Provision does not apply to failures to meet federally promulgated performance standards or emission limits, including, but not limited to, new source performance standards and national emission standards for hazardous air pollutants. The affirmative defense provision does not apply to state implementation plan (sip) limits or permit limits that have been set taking into account potential emissions during malfunctions, including, but not necessarily limited to, certain limits with 30-day or longer averaging times, limits that indicate they apply during malfunctions, and limits that indicate they apply at all times or without exception.

#### e. Circumvention Clause

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air pollutants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

#### f. Compliance Certifications

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in the Colorado State Implementation Plan, nothing in the Colorado State Implementation Plan shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. Evidence that has the effect of making any relevant standard or permit term more stringent shall not be credible for proving a violation of the standard or permit term.

When compliance or non-compliance is demonstrated by a test or procedure provided by permit or other applicable requirement, the owner or operator shall be presumed to be in compliance or non-compliance unless other relevant credible evidence overcomes that presumption.

# g. Affirmative Defense Provision for Excess Emissions During Startup and Shutdown

An affirmative defense is provided to owners and operators for civil penalty actions for excess emissions during periods of startup and shutdown. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of the evidence that:

- (i) The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;
- (ii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance;
- (iii) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (iv) The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;
- (v) All possible steps were taken to minimize the impact of excess emissions on ambient air quality;
- (vi) All emissions monitoring systems were kept in operation (if at all possible);
- (vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence; and,

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(viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This subparagraph is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement.

The owner or operator of the facility experiencing excess emissions during startup and shutdown shall notify the Division verbally as soon as possible, but no later than two (2) hours after the start of the next working day, and shall submit written quarterly notification following the initial occurrence of the excess emissions. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to State Implementation Plan provisions or other requirements that derive from new source performance standards or national emissions standards for hazardous air pollutants, or any other federally enforceable performance standard or emission limit with an averaging time greater than twentyfour hours. In addition, an affirmative defense cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or Prevention of Significant Deterioration (PSD) increments.

In making any determination whether a source established an affirmative defense, the Division shall consider the information within the notification required above and any other information the Division deems necessary, which may include, but is not limited to, physical inspection of the facility and review of documentation pertaining to the maintenance and operation of process and air pollution control equipment

#### 4. **Compliance Requirements**

### Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.C.9., V.C.11. & 16.d., § 25-7-122.1(2), C.R.S.

- The permittee must comply with all conditions of the Operating Permit. Any permit noncompliance relating to federally-enforceable terms or conditions constitutes a violation of the federal act, as well as the state act and Regulation No. 3. Any permit noncompliance relating to state-only terms or conditions constitutes a violation of the state act and Regulation No. 3, shall be enforceable pursuant to state law, and shall not be enforceable by citizens under § 304 of the federal act. Any such violation of the federal act, the state act or regulations implementing either statute is grounds for enforcement action, for permit termination, revocation and reissuance or modification or for denial of a permit renewal application.
- b. It shall not be a defense for a permittee in an enforcement action or a consideration in favor of a permittee in a permit termination, revocation or modification action or action denying a permit renewal application that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of any request by c. the permittee for a permit modification, revocation and reissuance, or termination, or any notification of planned changes or anticipated noncompliance does not stay any permit condition, except as provided in §§ X. and XI. of Regulation No. 3, Part C.
- d. The permittee shall furnish to the Air Pollution Control Division, within a reasonable time as specified by the Division, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permittee, including information claimed to be confidential. Any information subject to a claim of confidentiality shall be specifically identified and submitted separately from information not subject to the claim.

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- e. Any schedule for compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental, and shall not sanction noncompliance with, the applicable requirements on which it is based.
- f. For any compliance schedule for applicable requirements with which the source is not in compliance at the time of permit issuance, the permittee shall submit, at least every 6 months unless a more frequent period is specified in the applicable requirement or by the Air Pollution Control Division, progress reports which contain the following:
  - (i) dates for achieving the activities, milestones, or compliance required in the schedule for compliance, and dates when such activities, milestones, or compliance were achieved; and
  - (ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- g. The permittee shall not knowingly falsify, tamper with, or render inaccurate any monitoring device or method required to be maintained or followed under the terms and conditions of the Operating Permit.

## 5. Emergency Provisions

## Regulation No. 3, 5 CCR 1001-5, Part C, § VII.

An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed the technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. "Emergency" does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. An emergency constitutes an affirmative defense to an enforcement action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. the permitted facility was at the time being properly operated;
- c. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. the permittee submitted oral notice of the emergency to the Air Pollution Control Division no later than noon of the next working day following the emergency, and followed by written notice within one month of the time when emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

This emergency provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

#### 6. Emission Controls for Asbestos

#### Regulation No. 8, 5 CCR 1001-10, Part B

The permittee shall not conduct any asbestos abatement activities except in accordance with the provisions of Regulation No. 8, Part B, "asbestos control."

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#### 7. **Emissions Trading, Marketable Permits, Economic Incentives**

## Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.13.

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are specifically provided for in the permit.

#### 8. **Fee Payment**

### C.R.S. §§ 25-7-114.1(6) and 25-7-114.7

- a. The permittee shall pay an annual emissions fee in accordance with the provisions of § 25-7-114.7. A 1% per month late payment fee shall be assessed against any invoice amounts not paid in full on the 91st day after the date of invoice, unless a permittee has filed a timely protest to the invoice amount.
- The permittee shall pay a permit processing fee in accordance with the provisions of § 25-7-114.7. If the Division b. estimates that processing of the permit will take more than 30 hours, it will notify the permittee of its estimate of what the actual charges may be prior to commencing any work exceeding the 30 hour limit.
- The permittee shall pay an APEN fee in accordance with the provisions of § 25-7-114.1(6) for each APEN or c. revised APEN filed.

#### 9. **Fugitive Particulate Emissions**

## Regulation No. 1, 5 CCR 1001-3, § III.D.1.

The permittee shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions into the atmosphere, in accordance with the provisions of Regulation No. 1, § III.D.1.

#### 10. **Inspection and Entry**

#### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.16.b.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Division, or any authorized representative, to perform the following:

- enter upon the permittee's premises where an Operating Permit source is located, or emissions-related activity is a. conducted, or where records must be kept under the terms of the permit;
- have access to, and copy, at reasonable times, any records that must be kept under the conditions of the permit; b.
- inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), c. practices, or operations regulated or required under the Operating Permit;
- sample or monitor at reasonable times, for the purposes of assuring compliance with the Operating Permit or d. applicable requirements, any substances or parameters.

#### 11. **Minor Permit Modifications**

## Regulation No. 3, 5 CCR 1001-5, Part C, §§ X. & XI.

The permittee shall submit an application for a minor permit modification before making the change requested in the application. The permit shield shall not extend to minor permit modifications.

#### 12. **New Source Review**

#### Regulation No. 3, 5 CCR 1001-5, Part B

The permittee shall not commence construction or modification of a source required to be reviewed under the New Source Review provisions of Regulation No. 3, Part B, without first receiving a construction permit.

#### 13. No Property Rights Conveyed

# Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.11.d.

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### 14. Odor

### Regulation No. 2, 5 CCR 1001-4, Part A

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 2 concerning odorous emissions.

#### **15. Off-Permit Changes to the Source**

#### Regulation No. 3, 5 CCR 1001-5, Part C, § XII.B.

The permittee shall record any off-permit change to the source that causes the emissions of a regulated pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from the change, including any other data necessary to show compliance with applicable ambient air quality standards. The permittee shall provide contemporaneous notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permit shield shall not apply to any off-permit change.

#### 16. **Opacity**

#### Regulation No. 1, 5 CCR 1001-3, §§ I., II.

The permittee shall comply with the opacity emissions limitation set forth in Regulation No. 1, §§ I.-II.

#### 17. **Open Burning**

#### Regulation No. 9, 5 CCR 1001-11

The permittee shall obtain a permit from the Division for any regulated open burning activities in accordance with provisions of Regulation No. 9.

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## 18. Ozone Depleting Compounds

#### Regulation No. 15, 5 CCR 1001-17

The permittee shall comply with the provisions of Regulation No. 15 concerning emissions of ozone depleting compounds. Sections I., II.C., II.D., III. IV., and V. of Regulation No. 15 shall be enforced as a matter of state law only.

### 19. Permit Expiration and Renewal

### Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.6., IV.C., V.C.2.

- a. The permit term shall be five (5) years. The permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted.
- b. Applications for renewal shall be submitted at least twelve months, but not more than 18 months, prior to the expiration of the Operating Permit. An application for permit renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. A copy of any materials incorporated by reference must be included with the application.

#### 20. Portable Sources

#### Regulation No. 3, 5 CCR 1001-5, Part C, § II.D.

Portable Source permittees shall notify the Air Pollution Control Division at least 10 days in advance of each change in location.

## 21. Prompt Deviation Reporting

# Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.7.b.

The permittee shall promptly report any deviation from permit requirements, including those attributable to malfunction conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken.

"Prompt" is defined as follows:

- a. Any definition of "prompt" or a specific timeframe for reporting deviations provided in an underlying applicable requirement as identified in this permit; or
- b. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:
  - (i) For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report shall be made within 24 hours of the occurrence;
  - (ii) For emissions of any regulated air pollutant, excluding a hazardous air pollutant or a toxic air pollutant that continue for more than two hours in excess of permit requirements, the report shall be made within 48 hours; and
  - (iii) For all other deviations from permit requirements, the report shall be submitted every six (6) months, except as otherwise specified by the Division in the permit in accordance with paragraph 22.d. below.

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If any of the conditions in paragraphs b.i or b.ii above are met, the source shall notify the Division by telephone C (303-692-3155) or facsimile (303-782-0278) based on the timetables listed above. [Explanatory note: Notification by telephone or facsimile must specify that this notification is a deviation report for an Operating Permit.] A written notice, certified consistent with General Condition 2.a. above (Certification Requirements), shall be submitted within 10 working days of the occurrence. All deviations reported under this section shall also be identified in the 6-month report required above.

"Prompt reporting" does not constitute an exception to the requirements of "Emergency Provisions" for the purpose of avoiding enforcement actions.

#### 22. **Record Keeping and Reporting Requirements**

#### Regulation No. 3, 5 CCR 1001-5, Part A, § II.; Part C, §§ V.C.6., V.C.7.

- Unless otherwise provided in the source specific conditions of this Operating Permit, the permittee shall maintain a. compliance monitoring records that include the following information:
  - (i) date, place as defined in the Operating Permit, and time of sampling or measurements;
  - (ii) date(s) on which analyses were performed;
  - the company or entity that performed the analysis; (iii)
  - (iv) the analytical techniques or methods used;
  - (v) the results of such analysis; and
  - (vi) the operating conditions at the time of sampling or measurement.
- b. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information, for this purpose, includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit. With prior approval of the Air Pollution Control Division, the permittee may maintain any of the above records in a computerized form.
- Permittees must retain records of all required monitoring data and support information for the most recent twelve c. (12) month period, as well as compliance certifications for the past five (5) years on-site at all times. A permittee shall make available for the Air Pollution Control Division's review all other records of required monitoring data and support information required to be retained by the permittee upon 48 hours advance notice by the Division.
- d. The permittee shall submit to the Air Pollution Control Division all reports of any required monitoring at least every six (6) months, unless an applicable requirement, the compliance assurance monitoring rule, or the Division requires submission on a more frequent basis. All instances of deviations from any permit requirements must be clearly identified in such reports.
- The permittee shall file an Air Pollutant Emissions Notice ("APEN") prior to constructing, modifying, or altering any facility, process, activity which constitutes a stationary source from which air pollutants are or are to be emitted, unless such source is exempt from the APEN filing requirements of Regulation No. 3, Part A, § II.D. A revised APEN shall be filed annually whenever a significant change in emissions, as defined in Regulation No. 3, Part A, § II.C.2., occurs; whenever there is a change in owner or operator of any facility, process, or activity; whenever new control equipment is installed; whenever a different type of control equipment replaces an existing type of control equipment; whenever a permit limitation must be modified; or before the APEN expires. An APEN is valid for a period of five years. The five-year period recommences when a revised APEN is received by the Air Pollution Control Division. Revised APENs shall be submitted no later than 30 days before the five-year term expires.

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Permittees submitting revised APENs to inform the Division of a change in actual emission rates must do so by April 30 of the following year. Where a permit revision is required, the revised APEN must be filed along with a request for permit revision. APENs for changes in control equipment must be submitted before the change occurs. Annual fees are based on the most recent APEN on file with the Division.

# 23. Reopenings for Cause

## Regulation No. 3, 5 CCR 1001-5, Part C, § XIII.

- a. The Air Pollution Control Division shall reopen, revise, and reissue Operating Permits; permit reopenings and reissuance shall be processed using the procedures set forth in Regulation No. 3, Part C, § III., except that proceedings to reopen and reissue permits affect only those parts of the permit for which cause to reopen exists.
- b. The Division shall reopen a permit whenever additional applicable requirements become applicable to a major source with a remaining permit term of three or more years, unless the effective date of the requirements is later than the date on which the permit expires, or unless a general permit is obtained to address the new requirements; whenever additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program; whenever the Division determines the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or whenever the Division determines that the permit must be revised or revoked to assure compliance with an applicable requirement.
- c. The Division shall provide 30 days' advance notice to the permittee of its intent to reopen the permit, except that a shorter notice may be provided in the case of an emergency.
- d. The permit shield shall extend to those parts of the permit that have been changed pursuant to the reopening and reissuance procedure.

## **24.** Section 502(b)(10) Changes

#### Regulation No. 3, 5 CCR 1001-5, Part C, § XII.A.

The permittee shall provide a minimum 7-day advance notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permittee shall attach a copy of each such notice given to its Operating Permit.

#### 25. Severability Clause

#### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.10.

In the event of a challenge to any portion of the permit, all emissions limits, specific and general conditions, monitoring, record keeping and reporting requirements of the permit, except those being challenged, remain valid and enforceable.

# 26. Significant Permit Modifications

#### Regulation No. 3, 5 CCR 1001-5, Part C, § III.B.2.

The permittee shall not make a significant modification required to be reviewed under Regulation No. 3, Part B ("Construction Permit" requirements) without first receiving a construction permit. The permittee shall submit a complete Operating Permit application or application for an Operating Permit revision for any new or modified source within twelve months of commencing operation, to the address listed in Item 1 in Appendix D of this permit. If the permittee chooses to use the "Combined Construction/Operating Permit" application procedures of Regulation No. 3, Part C, then the Operating Permit must be received prior to commencing construction of the new or modified source.

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#### 27. Special Provisions Concerning the Acid Rain Program

#### Regulation No. 3, 5 CCR 1001-5, Part C, §§ V.C.1.b. & 8

- a. Where an applicable requirement of the federal act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal act, 40 Code of Federal Regulations (CFR) Part 72, both provisions shall be incorporated into the permit and shall be federally enforceable.
- b. Emissions exceeding any allowances that the source lawfully holds under Title IV of the federal act or the regulations promulgated thereunder, 40 CFR Part 72, are expressly prohibited.

#### 28. Transfer or Assignment of Ownership

#### Regulation No. 3, 5 CCR 1001-5, Part C, § II.C.

No transfer or assignment of ownership of the Operating Permit source will be effective unless the prospective owner or operator applies to the Air Pollution Control Division on Division-supplied Administrative Permit Amendment forms, for reissuance of the existing Operating Permit. No administrative permit shall be complete until a written agreement containing a specific date for transfer of permit, responsibility, coverage, and liability between the permittee and the prospective owner or operator has been submitted to the Division.

#### 29. Volatile Organic Compounds

#### Regulation No. 7, 5 CCR 1001-9, §§ III & V.

The requirements in paragraphs a, b and e apply to sources located in an ozone non-attainment area or the Denver 1-hour ozone attainment/maintenance area. The requirements in paragraphs c and d apply statewide.

- a. All storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened, actuated, or used for necessary and proper activities (e.g. maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.
  - Detectable vapor loss shall be determined visually, by touch, by presence of odor, or using a portable hydrocarbon analyzer. When an analyzer is used, detectable vapor loss means a VOC concentration exceeding 10,000 ppm. Testing shall be conducted as in Regulation No. 7, Section VIII.C.3.
- b. Except when otherwise provided by Regulation No. 7, all volatile organic compounds, excluding petroleum liquids, transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be transferred using submerged or bottom filling equipment. For top loading, the fill tube shall reach within six inches of the bottom of the tank compartment. For bottom-fill operations, the inlet shall be flush with the tank bottom.
- c. The permittee shall not dispose of volatile organic compounds by evaporation or spillage unless Reasonably Available Control Technology (RACT) is utilized.
- d. No owner or operator of a bulk gasoline terminal, bulk gasoline plant, or gasoline dispensing facility as defined in Colorado Regulation No. 7, Section VI, shall permit gasoline to be intentionally spilled, discarded in sewers, stored in open containers, or disposed of in any other manner that would result in evaporation.
- e. Beer production and associated beer container storage and transfer operations involving volatile organic compounds with a true vapor pressure of less than 1.5 PSIA actual conditions are exempt from the provisions of paragraph b, above.

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## 30. Wood Stoves and Wood burning Appliances

Regulation No. 4, 5 CCR 1001-6

The permittee shall comply with the provisions of Regulation No. 4 concerning the advertisement, sale, installation, and use of wood stoves and wood burning appliances.

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# **OPERATING PERMIT APPENDICES**

- A INSPECTION INFORMATION
- **B- MONITORING AND PERMIT DEVIATION REPORT**
- C COMPLIANCE CERTIFICATION REPORT
- D NOTIFICATION ADDRESSES
- E PERMIT ACRONYMS
- F PERMIT MODIFICATIONS

## \*DISCLAIMER:

None of the information found in these Appendices shall be considered to be State or Federally enforceable, except as otherwise provided in the permit, and is presented to assist the source, permitting authority, inspectors, and citizens.

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#### **APPENDIX A - Inspection Information**

#### **Directions to Plant**

The facility is located at 6211 Weld County Road 51 (between Hudson and Keenesburg, east of I-76, accessible from the Kersey Rd exit).

#### **Safety Equipment Required**

Eye Protection, Hard Hat, Safety Shoes and Hearing Protection

#### **Facility Plot Plan**

Figure 1 (following page) shows the plot plan as submitted on March 14, 2005 with the source's Title V Operating Permit Application.

#### **List of Insignificant Activities**

The following list of insignificant activities was provided by the source to assist in the understanding of the facility layout. Since there is no requirement to update such a list, activities may have changed since the last filing.

Insignificant activities and/or sources of emissions as identified in the Title V permit application:

<u>Units with emissions less than APEN de minims – criteria and non-criteria reportable pollutants (Reg 3, Part C.II.E.3.a & b)</u>

Two (2) 14,200 gal anhydrous ammonia storage tanks Portable Hotsy pressure washer

Fuel (gaseous) burning equipment < 5 MMBtu/hr (Reg 3, Part C.II.E.3.k)

Water bath fuel heater

Landscaping and site housekeeping devices < 10 hp (Reg 3, Part C.II.E.3.bb)

Garden tractor

Fuel storage and dispensing equipment in ozone attainment areas throughput < 400 gal/day averaged over 30 days (Reg 3 Part C.II.E.3.ccc)

100 gallon portable diesel fuel tank mounted in the back of a facility vehicle

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Storage tanks with annual throughput less than 400,000 gal and meeting content specifications (Reg 3, Part C.II.E.3.fff)

500 gallon above ground diesel fuel tank 8,400 gallon gas condensate tank

Forklifts (Reg 3, Part C.II.E.3.kkk)

Forklift

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#### APPENDIX B

#### **Reporting Requirements and Definitions**

with codes ver 2/20/07

Please note that, pursuant to 113(c)(2) of the federal Clean Air Act, any person who knowingly:

- (A) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any notice, application, record, report, plan, or other document required pursuant to the Act to be either filed or maintained (whether with respect to the requirements imposed by the Administrator or by a State);
- (B) fails to notify or report as required under the Act; or
- (C) falsifies, tampers with, renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under the Act shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

The permittee must comply with all conditions of this operating permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The Part 70 Operating Permit program requires three types of reports to be filed for all permits. All required reports must be certified by a responsible official.

#### **Report #1: Monitoring Deviation Report** (due at least every six months)

For purposes of this operating permit, the Division is requiring that the monitoring reports are due every six months unless otherwise noted in the permit. All instances of deviations from permit monitoring requirements must be clearly identified in such reports.

For purposes of this operating permit, monitoring means any condition determined by observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as the recordkeeping associated with that monitoring. This would include, for example, fuel use or process rate monitoring, fuel analyses, and operational or control device parameter monitoring.

#### **Report #2: Permit Deviation Report (must be reported "promptly")**

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit

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requirements, including those attributable to malfunctions as defined in this Appendix, the probable cause of such deviations, and any corrective actions or preventive measures taken. All deviations from any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

For purposes of this operating permit, "malfunction" shall refer to both emergency conditions and malfunctions. Additional discussion on these conditions is provided later in this Appendix.

For purposes of this operating permit, the Division is requiring that the permit deviation reports are due as set forth in General Condition 21. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. For example, quarterly Excess Emission Reports required by an NSPS or Regulation No. 1, Section IV.

In addition to the monitoring deviations discussed above, included in the meaning of deviation for the purposes of this operating permit are any of the following:

- (1) A situation where emissions exceed an emission limitation or standard contained in the permit;
- (2) A situation where process or control device parameter values demonstrate that an emission limitation or standard contained in the permit has not been met;
- (3) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or,
- (4) A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only if the emission point is subject to CAM)

For reporting purposes, the Division has combined the Monitoring Deviation Report with the Permit Deviation Report. All deviations shall be reported using the following codes:

1 = **Standard:** When the requirement is an emission limit or standard 2 = **Process:** When the requirement is a production/process limit

3 = Monitor: When the requirement is monitoring 4 = Test: When the requirement is testing

5 = Maintenance: When required maintenance is not performed
 6 = Record: When the requirement is recordkeeping
 7 = Report: When the requirement is reporting

**8 = CAM:** A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the

Compliance Assurance Monitoring (CAM) Rule) has occurred.

**9 = Other:** When the deviation is not covered by any of the above categories

#### **Report #3: Compliance Certification (annually, as defined in the permit)**

Submission of compliance certifications with terms and conditions in the permit, including emission limitations, standards, or work practices, is required not less than annually.

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Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other material information (i.e. information beyond required monitoring that has been specifically assessed in relation to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

- The identification of each term or condition of the permit that is the basis of the certification;
- Whether or not the method(s) used by the owner or operator for determining the compliance status with each permit term and condition during the certification period was the method(s) specified in the permit. Such methods and other means shall include, at a minimum, the methods and means required in the permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Clean Air Act, which prohibits knowingly making a false certification or omitting material information;
- The status of compliance with the terms and conditions of the permit, and whether compliance was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. Note that not all deviations are considered violations.
- Such other facts as the Division may require, consistent with the applicable requirements to which the source is subject, to determine the compliance status of the source.

The Certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only for emission points subject to CAM)

Note the requirement that the certification shall identify each deviation and take it into account in the compliance certification. Previously submitted deviation reports, including the deviation report submitted at the time of the annual certification, may be referenced in the compliance certification.

#### Startup, Shutdown, Malfunctions and Emergencies

Understanding the application of Startup, Shutdown, Malfunctions and Emergency Provisions, is very important in both the deviation reports and the annual compliance certifications.

## Startup, Shutdown, and Malfunctions

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Renewed: 7/1/12

Last Revised: 8/8/12

For example, given the various emissions limitations and monitoring requirements to which a source may be subject, a deviation from one requirement may not be a deviation under another requirement which recognizes an exception and/or special circumstances relating to that same event.

Please note that exceedances of some New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards that occur during Startup, Shutdown or Malfunctions may not be considered to be non-compliance since emission limits or standards often do not apply unless specifically stated in the NSPS. Such exceedances must, however, be reported as excess emissions per the NSPS/MACT rules and would still be noted in the deviation report. In regard to compliance certifications, the permittee should be confident of the information related to those deviations when making compliance determinations since they are subject to Division review. The concepts of Startup, Shutdown and Malfunctions also exist for Best Available Control Technology (BACT) sources, but are not applied in the same fashion as for NSPS and MACT sources.

## **Emergency Provisions**

Under the Emergency provisions of Part 70 certain operational conditions may act as an affirmative defense against enforcement action if they are properly reported.

#### **DEFINITIONS**

**Malfunction** (NSPS) means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

**Malfunction** (SIP) means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

**Emergency** means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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## Monitoring and Permit Deviation Report - Part I

- 1. Following is the **required** format for the Monitoring and Permit Deviation report to be submitted to the Division as set forth in General Condition 21. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.
- 2. Part II of this Appendix B shows the format and information the Division will require for describing periods of monitoring and permit deviations, or malfunction or emergency conditions as indicated in the Table below. One Part II Form must be completed for each Deviation. Previously submitted reports (e.g. EER's or malfunctions) may be referenced and the form need not be filled out in its entirety.

FACILITY NAME: Public Service Compa	ny of Colorado - Rocky Mountain Energy Center
OPERATING PERMIT NO: 05OPWE279	
REPORTING PERIOD:	(see first page of the permit for specific reporting period and dates)

Operating Permit Unit		Deviation During P		Deviation Code <sup>2</sup>	Malfur Emerg Condition During	gency Reported
ID	Unit Description	YES	NO		YES	NO
CT-01	One (1) Westinghouse, Model No. 501FD, Natural Gas-Fired Combustion Turbine, Serial No. 37A8191. The Turbine is Rated at 1785 MMBtu/hr (HHV at ISO conditions). The turbine is operated in combined cycle mode only and the heat recovery steam generator (HRSG) is equipped with a duct burner rated at 675 MMBtu/hr. The turbine drives a generator capable of generating 152 MW of power and the HRSG drives a steam generator rated at 326 MW (at peak capacity).					
CT-02	One (1) Westinghouse, Model No. 501FD, Natural Gas-Fired Combustion Turbine, Serial No. 37A8196. The Turbine is Rated at 1785 MMBtu/hr (HHV at ISO conditions). The turbine is operated in combined cycle mode only and the heat recovery steam generator (HRSG) is equipped with a duct burner rated at 675 MMBtu/hr. The turbine drives a generator capable of generating 152 MW of power and the HRSG drives a steam generator rated at 326 MW (at peak capacity).					
S005	Caterpillar, Model No. 3512B, Internal Combustion Engine Driving an Emergency Generator, Serial No. 1GZ01360. The Engine is Diesel Fuel-Fired and rated at 1810 hp and 12.2 MMBtu/hr.					

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Operating Permit Unit		Deviatior During F		Deviation Code <sup>2</sup>	Malfur Emerg Condition During	gency Reported
ID	Unit Description	YES	NO		YES	NO
S004	Rentech, Natural Gas Fired Boiler, Rated at 129 MMBtu/hr, Serial No. 2002-49.					
S006	Marley, Model No. F4910, 12 Cell Cooling Water Tower, Rated at 176,000 gal/min.					
M001	Gasoline Storage Tank, 500 gallons, aboveground					
M002	Cold Cleaner Solvent Vat					
M003	John Deere, Model No. 6081AF001, Serial No. RG6081A159985, Diesel Fired Internal Combustion Engine Driving an Emergency Fire Pump Engine, Rated at 182 hp and 1.26 MMBtu/hr.					
	General Conditions					
	Insignificant Activities					

<sup>&</sup>lt;sup>1</sup> See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

1 = Standard: When the requirement is an emission limit or standard 2 = Process: When the requirement is a production/process limit

3 = Monitor: When the requirement is monitoring 4 = Test: When the requirement is testing

5 = Maintenance: When required maintenance is not performed
 6 = Record: When the requirement is recordkeeping
 7 = Report: When the requirement is reporting

**8 = CAM:** A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance

Monitoring (CAM) Rule) has occurred.

**9 = Other:** When the deviation is not covered by any of the above categories

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<sup>&</sup>lt;sup>2</sup> Use the following entries, as appropriate:

# **Monitoring and Permit Deviation Report - Part II**

FACILITY NAME: Public Service Compa OPERATING PERMIT NO: 05OPWE279 REPORTING PERIOD:	ny of Colorado - Ro	cky Mountain Ener	gy Center
Is the deviation being claimed as an:	Emergency	Malfunction	N/A
(For NSPS/MACT) Did the deviation occur during:	Startup Normal Operation		Malfunction
OPERATING PERMIT UNIT IDENTIFICATION:			
Operating Permit Condition Number Citation			
Explanation of Period of Deviation			
Duration (start/stop date & time)			
Action Taken to Correct the Problem			
Measures Taken to Prevent a Reoccurrence of the Prevent and Preven	<u>roblem</u>		
Dates of Malfunctions/Emergencies Reported (if app	plicable)		
Deviation Code	Division Code QA:		
SEE EXAMPL	E ON THE NEXT	PAGE	

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FACILITY NAME:

Acme Corp.

# **EXAMPLE**

OPERATING PERMIT NO: 96OPZZXXX REPORTING PERIOD: 1/1/04 - 6/30/06				
Is the deviation being claimed as an:	Emergency	Malfunction _	XX N/A	
(For NSPS/MACT) Did the deviation occur during:	Startup Normal Operation	Shutdown	Malfunction	
OPERATING PERMIT UNIT IDENTIFICATION:				
Asphalt Plant with a Scrubber for Particulate Contro	l - Unit XXX			
Operating Permit Condition Number Citation				
Section II, Condition 3.1 - Opacity Limitation				
Explanation of Period of Deviation				
Slurry Line Feed Plugged				
<u>Duration</u>				
START- 1730 4/10/06 END- 1800 4/10/06				
Action Taken to Correct the Problem				
Line Blown Out				
Measures Taken to Prevent Reoccurrence of the Pro	<u>olem</u>			
Replaced Line Filter				
Dates of Malfunction/Emergencies Reported (if appl	<u>icable)</u>			
5/30/06 to A. Einstein, APCD				
Deviation Code	Division Code QA:			

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Renewed: 7/1/12

Last Revised: 8/8/12

# $\label{eq:monitoring} \textbf{Monitoring and Permit Deviation Report - Part III}$

## REPORT CERTIFICATION

SOURCE NAME: Public Service Compar	ay of Colorado - Rocky Mountain	a Energy Center
FACILITY IDENTIFICATION NUMBER	R: 1231342	
PERMIT NUMBER: 05OPWE279		
REPORTING PERIOD:	_ (see first page of the permit fo	or specific reporting period and dates)
All information for the Title V Semi-Annu defined in Colorado Regulation No. 3, Par packaged with the documents being submit	rt A, Section I.B.38. This signed	· ·
STATEMENT OF COMPLETENESS		
I have reviewed the information being s formed after reasonable inquiry, I certif are true, accurate and complete.	•	
Please note that the Colorado Statutes s 1-501(6), C.R.S., makes any false materiaguilty of a misdemeanor and may be pu 122.1, C.R.S.	ial statement, representation, o	or certification in this document is
Printed or Typed Name		Title
Signature of Responsi	ible Official	Date Signed
Note: Deviation reports shall be submitted permit. No copies need be sent to the U		ss given in Appendix D of this
Operating Permit Number: 05OPWE279		First Issued: 7/1/07

#### APPENDIX C

#### **Required Format for Annual Compliance Certification Report**

with codes ver 2/20/07

Following is the format for the Compliance Certification report to be submitted to the Division and the U.S. EPA annually based on the effective date of the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

FACILITY NAME: Public Service Company of Colorado - Rocky Mountain Energy Center

OPERATING PERMIT NO: 05OPWE279 REPORTING PERIOD:

## I. Facility Status

\_\_\_\_ During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the Permit.

With the possible exception of the deviations identified in the table below, this source was in compliance with all terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference, during the entire reporting period. The method used to determine compliance for each term and condition is the method specified in the Permit, unless otherwise indicated and described in the deviation report(s). Note that not all deviations are considered violations.

Operating Permit Unit ID	Unit Description	Devia Repo		Metho	toring od per nit? <sup>2</sup>	Contin	mpliance uous or ittent? <sup>3</sup>
		Previous	Current	YES	NO	Continuous	Intermittent
CT-01	One (1) Westinghouse, Model No. 501FD, Natural Gas-Fired Combustion Turbine, Serial No. 37A8191. The Turbine is Rated at 1785 MMBtu/hr (HHV at ISO conditions). The turbine is operated in combined cycle mode only and the heat recovery steam generator (HRSG) is equipped with a duct burner rated at 675 MMBtu/hr. The turbine drives a generator capable of generating 152 MW of power and the HRSG drives a steam generator rated at 326 MW (at peak capacity).						

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Operating Permit Unit ID	Unit Description	Deviations Reported <sup>1</sup>			toring od per nit? <sup>2</sup>	Contin	mpliance uous or ittent? <sup>3</sup>
		Previous	Current	YES	NO	Continuous	Intermittent
CT-02	One (1) Westinghouse, Model No. 501FD, Natural Gas-Fired Combustion Turbine, Serial No. 37A8196. The Turbine is Rated at 1785 MMBtu/hr (HHV at ISO conditions). The turbine is operated in combined cycle mode only and the heat recovery steam generator (HRSG) is equipped with a duct burner rated at 675 MMBtu/hr. The turbine drives a generator capable of generating 152 MW of power and the HRSG drives a steam generator rated at 326 MW (at peak capacity).						
S005	Caterpillar, Model No. 3512B, Internal Combustion Engine Driving an Emergency Generator, Serial No. 1GZ01360. The Engine is Diesel Fuel-Fired and rated at 1810 hp and 12.2 MMBtu/hr.						
S004	Rentech, Natural Gas Fired Boiler, Rated at 129 MMBtu/hr, Serial No. 2002-49.						
S006	Marley, Model No. F4910, 12 Cell Cooling Water Tower, Rated at 176,000 gal/min.						
M001	Gasoline Storage Tank, 500 gallons, aboveground						
M002	Cold Cleaner Solvent Vat						
M003	John Deere, Model No. 6081AF001, Serial No. RG6081A159985, Diesel Fired Internal Combustion Engine Driving an Emergency Fire Pump Engine, Rated at 182 hp and 1.26 MMBtu/hr.						
	General Conditions Insignificant Activities <sup>4</sup>						

If deviations were noted in a previous deviation report, put an "X" under "previous". If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an "X" under "current". Mark both columns if both apply.

NOTE:

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<sup>&</sup>lt;sup>2</sup> Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

<sup>&</sup>lt;sup>3</sup> Note whether the compliance status with of each term and condition provided was continuous or intermittent. "Intermittent Compliance" can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance therefore does not necessarily mean that any noncompliance has occurred.

The Periodic Monitoring requirements of the Operating Permit program rule are intended to provide assurance that even in the absence of a continuous system of monitoring the Title V source can demonstrate whether it has operated in continuous compliance for the duration of the reporting period. Therefore, if a source 1) conducts all of the monitoring and recordkeeping required in its permit, even if such activities are done periodically and not continuously, and if 2) such monitoring and recordkeeping does not indicate non-compliance, and if 3) the Responsible Official is not aware of any credible evidence that indicates non-compliance, then the Responsible Official can certify that the emission point(s) in question were in continuous compliance during the applicable time period.

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<sup>&</sup>lt;sup>4</sup>Compliance status for these sources shall be based on a reasonable inquiry using readily available information.

II.	Statu	s for Accidental Re	lease Prevention Pr	rogram:		
	A.		is subject _ on Program (Section			o the provisions of the Accidental al Clean Air Act)
	В.	If subject: The fa		is	is no	ot in compliance with all the
						has been submitted to the location by the required date.
III.	Certi	ification				
Color	rado Re		t A, Section I.B.38.			ed by a responsible official as defined in ation document must be packaged with
reaso	nable		_			nation and belief formed after ntained in this certification are true,
C.R.S	S., mak	kes any false mater	ial statement, rep	resentation,	or certif	owingly, as defined in § 18-1-501(6), ication in this document is guilty of a ns of § 25-7 122.1, C.R.S.
		Printed or Typed	Name			Title
		Signature				Date Signed
NOT	E: All	C	ations shall be subn	mitted to the A	Air Pollu	tion Control Division and to the
Envir	onmen	tal Protection Agen	cy at the addresses	listed in App	endix D	of this Permit.

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#### APPENDIX D

#### **Notification Addresses**

#### 1. **Air Pollution Control Division**

Colorado Department of Public Health and Environment Air Pollution Control Division Operating Permits Unit APCD-SS-B1 4300 Cherry Creek Drive S. Denver, CO 80246-1530

**ATTN: Matt Burgett** 

## 2. United States Environmental Protection Agency

## Compliance Notifications:

Office of Enforcement, Compliance and Environmental Justice Mail Code 8ENF-T U.S. Environmental Protection Agency, Region VIII 1595 Wynkoop Street Denver, CO 80202-1129

#### Permit Modifications, Off Permit Changes:

Office of Partnerships and Regulatory Assistance Air and Radiation Programs, 8P-AR U.S. Environmental Protection Agency, Region VIII 1595 Wynkoop Street Denver, CO 80202-1129

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## **APPENDIX E**

## **Permit Acronyms**

## Listed Alphabetically:

AIRS -	Aerometric Information Retrieval System
AP-42-	EPA Document Compiling Air Pollutant Emission Factors
APEN -	Air Pollution Emission Notice (State of Colorado)
APCD -	Air Pollution Control Division (State of Colorado)
ASTM -	American Society for Testing and Materials
BACT -	Best Available Control Technology
BTU -	British Thermal Unit
CAA -	Clean Air Act (CAAA = Clean Air Act Amendments)
CCR -	Colorado Code of Regulations
CEM -	Continuous Emissions Monitor
CF -	Cubic Feet (SCF = Standard Cubic Feet)
CFR -	Code of Federal Regulations
CO -	Carbon Monoxide
COM -	Continuous Opacity Monitor
CRS -	Colorado Revised Statute
EF -	Emission Factor
EPA -	Environmental Protection Agency
FI -	Fuel Input Rate in MMBtu/hr
FR -	Federal Register
G -	Grams
Gal -	Gallon
GPM -	Gallons per Minute
HAPs -	Hazardous Air Pollutants
HP -	Horsepower
HP-HR -	Horsepower Hour ( $G/HP-HR = Grams per Horsepower Hour$ )
LAER -	Lowest Achievable Emission Rate
LBS -	Pounds
M -	Thousand
MM -	Million
MMscf -	Million Standard Cubic Feet
MMscfd -	Million Standard Cubic Feet per Day
N -	Normal Operation, as referenced in permit limitation table in Section II.1
N/A or NA -	Not Applicable
110	371. 0.11

NESHAP - National Emission Standards for Hazardous Air Pollutants NSPS - New Source Performance Standards

P - Process Weight Rate in Tons/Hr

Nitrogen Oxides

PE - Particulate Emissions

 $NO_X$  -

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PM -	Particulate Matter
LIVI -	rannounate iviante

PM<sub>10</sub> - Particulate Matter Under 10 Microns

PPM - Parts Per Million

PPMV - Parts Per Million, by Volume
PPMVD - Parts per Million, by Volume, Dry
PSD - Prevention of Significant Deterioration

PTE - Potential To Emit

RACT - Reasonably Available Control Technology

SCC - Source Classification Code

SCF - Standard Cubic Feet

SD - Shutdown, as referenced in permit limitation table in Section II.1

SIC - Standard Industrial Classification

SO<sub>2</sub> - Sulfur Dioxide

SU - Start-Up, as referenced in permit limitation table in Section II.1

TPY - Tons Per Year

TSP - Total Suspended Particulate
VOC - Volatile Organic Compounds

## **APPENDIX F**

## **Permit Modifications**

DATE OF REVISION	MODIFICATION TYPE	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION
August 8, 2012	Administrative Amendment	Section I, Condition 1.4	Condition 3.d was removed from the list of state- only requirements since EPA approved these provisions into Colorado's SIP.
		Section II, Condition 1.5.2	Corrected the mass emission limit from "126.8 tons/yr" to "240.4 tons/yr".
		Section II, Condition 2.5	Added notes indicating that the permittee is subject to the most recent requirements in 40 CFR Part 63 Subpart ZZZZ and that revisions to Subpart ZZZZ have been proposed and may change in the future.
		Section II, Condition 7	Moved the paragraph under the summary table regarding enforceability to Condition 7.2 as this is the more appropriate location. A note was added to Condition 7.2 indicating that the permittee is subject to the most recent requirements in 40 CFR Part 63 Subpart CCCCC. Condition 7.2.4 references an incorrect permit condition number for the compliance date, which is not included in the permit, so the compliance date was added and the reference to it was corrected. In addition, the language in this condition was updated to reflect the January 24, 2011 revisions. These revisions are not substantive.

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